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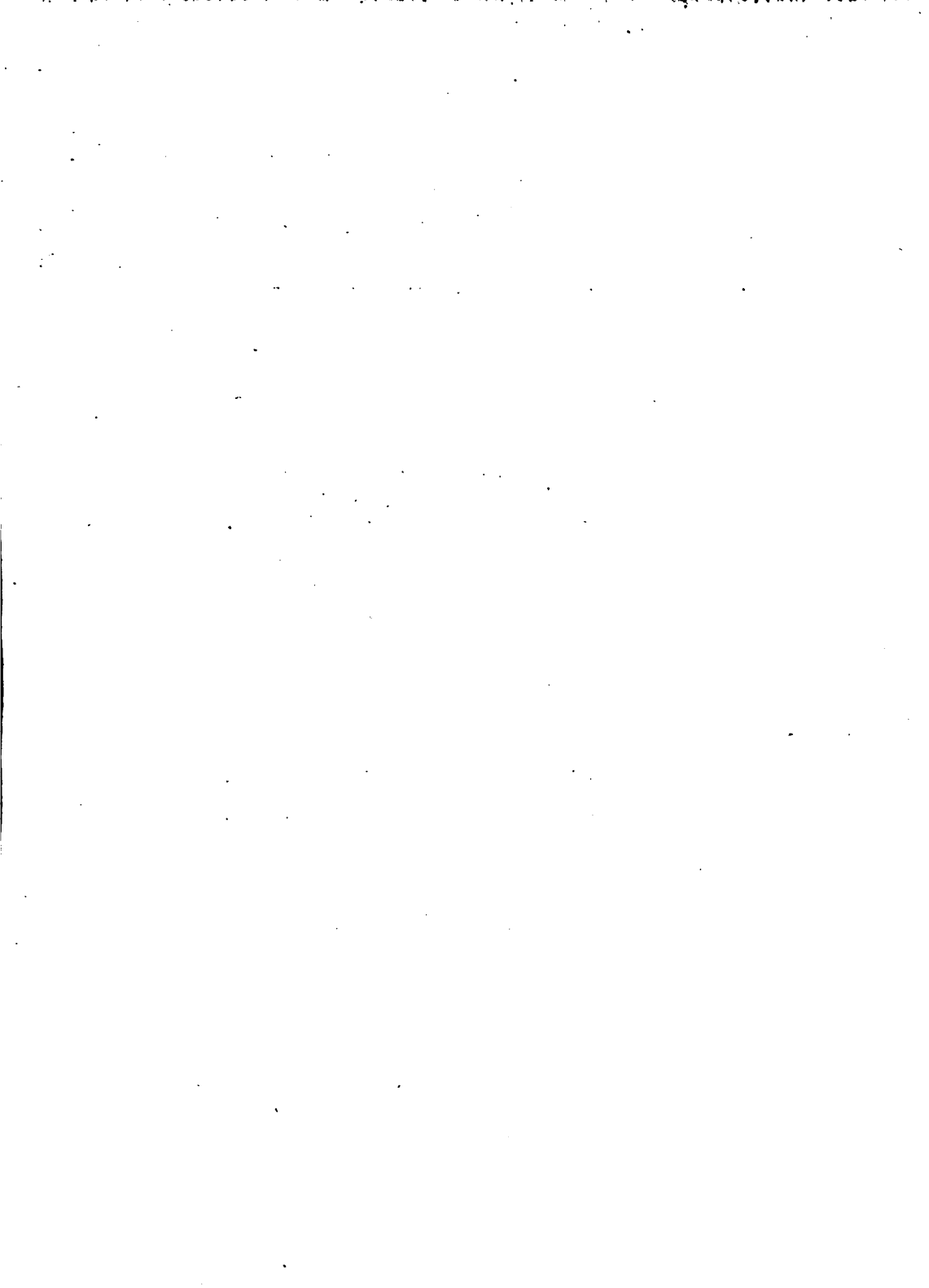


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HARMONIC PART-WRITING

BY
WILLIAM ALFRED WHITE

AUTHOR OF HARMONY AND EAR-TRAINING
THE ESSENTIALS OF HARMONY



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As a Token of Esteem

**THIS BOOK IS DEDICATED TO PETER CHRISTIAN LUTKIN, MUS. DOC.,
DEAN OF THE SCHOOL OF MUSIC, NORTHWESTERN UNIVERSITY,
EVANSTON, ILLINOIS**

PREFACE

THE single aim of this text is to give a mastery of the foundation of all composition — four-part writing. It does not assume to offer a theory of music, nor does it present an exposition of scales, intervals and chord material. Composition for four parts, vocal or instrumental, is its theme. The consideration of preliminary work is found in the author's "Harmony and Ear-Training," the first six chapters of which should be mastered by the student. After a half year's work on these chapters, "Harmonic Part-Writing" may be taken up and the two books then used simultaneously.

A complete substitute for the figured bass is here given. It is the outgrowth of a series of experiments extending over many years. The results secured with various classes in different sections of the country have given convincing evidence of its value. In the system of "thorough bass," a 6th-chord may mean the first inversion of a major, a minor, a diminished or an augmented triad, or even an augmented 6th-chord, there being no means of discriminating between them. The same objection holds for all other figurings; thus a 3-4-chord might mean the second inversion of a dominant 7th-chord, or of a diminished 7th-chord, or various kinds of secondary 7th-chords.

Another fault of the older system is that it tends to decidedly unmusical thinking. There is nothing in it to show the relation of chord-entities to the prevailing tonality; it tends to encourage the student merely to count up intervals from the given bass note,

irrespective of the kind of interval, and thus serves to prevent the mind from thinking of chords as such, with their various qualities. Still another, and perhaps a more serious objection, is that the old system fails to show adequately a modulation or transition into other keys, and completely fails to show the dual relation of one chord to two keys, which is in the majority of cases the introduction of the modulation.

The system used in the present book does away with these objectionable features, and is simple and clear. Roman figures, I, II, III, IV, V, VI, VII, show upon what degree of a key a chord is founded. The letters "a" and "b," respectively, indicate first and second inversion of triads. Thus I indicates a chord on the first degree of the scale; I_a the same chord in first inversion; I_b

the same chord in second inversion.

The 7th-chords are indicated by, I⁷, II⁷, III⁷, etc.; first and second inversions are indicated by "a" and "b," and for third inversion "c" is used. Thus the dominant 7th-chord in any key and the various inversions are indicated by V⁷, V⁷_a, V⁷_b, V⁷_c.

In modulation this system of figuring is very practical and its intent unmistakable. Wherever a modulation is introduced by a chord that has a dual relation, the chord receives the double marking to indicate such relations. Thus I indicates that the

tonic chord in the one key becomes the dominant chord in another; III indicates that the mediant chord in one key becomes the super-II tonic in another; VI⁷ indicates that the 7th-chord on the submediant

of one key becomes the 7th-chord on the subdominant of another, etc. Where a modulation occurs in which no chord is used that belongs to both keys it is indicated thus:



The author does not believe in the system of marking major chords in the key with large figures, minor chords with small figures, diminished chords with a degree sign, and augmented chords with a plus sign. The student should know absolutely just what kind of chord is found on each degree of the various kinds of scales without such extraneous helps. Such signs and helps merely tend to ignorance, for they encourage mental laziness by substituting symbols for knowledge.

There are many other features of this text that distinguish it from conventional systems. All the means of modulation are fully exemplified — in Part I by triads in close harmony, Sections 11 and 12; in Part II by triads in dispersed harmony, Section 9; in Part III by inverted triads or common chords, Section 7; in Part IV by means of dominant 7th-chords, Section 7; in Part V by means of diminished 7th-chords, Section 5; in Part VI by means of the various secondary 7th-chords, Section 4; in Part VII with 9th-chords; and in Part VIII through the various augmented 6th-chords.

The theory of "altered chords" is here replaced by a rational explanation of certain musical phenomena. The false doctrine thus supplanted has been a serious stumbling block in the path of students. It reached its extreme form in a recent work which states that C-E-G is a major chord; C#-E-G a major chord on C with a raised Root; C-E-G# a major chord with a raised Fifth; and C#-E♭-G a major chord on C with a raised Root and a minor Third. The utter absurdity of these statements is only one evidence of the stultifying contradictions of that system.

A new system, well grounded in sound psychology, is here outlined in Section 10 of Part II, Section 8 of Part III, Section 8 of Part IV, Sections 3, 4, 5 and 6 of Part V, Sections 5 and 6 of Part VI, and in Part VIII.

Another feature of this text is the complete exposition of the dual relations of all chords to various keys; and the systematic working out of this in practical exercises in Modulation and Expan-

sion of Key-Centre. Attention should also be called to the explanation and use of 9th-chords other than dominant 9th-chords; to the wide exposition of diminished 7th-chords; to the various augmented 6th-chords. Some of the things explained in Section 6 of Part VI, such as the dominant (or primary 7th-chord) on 4 of the melodic minor scale, have been used since the time of Bach, yet the author knows no text-book in which explanation of these phenomena has been made.

From the standpoint of the teacher, perhaps the strongest feature of this work is the fact that every exercise is musical, and that every exercise is capable of several versions; by working these out and comparing them, the musical taste and judgment of the student will inevitably be increased.

The book lends itself admirably to several different plans of instruction. The first of these is to follow the text page by page. This the author recommends, for in this way only one difficulty is presented to the pupil at a time. But it will be found entirely practicable, if desired, to schedule the book according to the Second or Third Plans.

Second Plan. — Part I, Section 1; Part II, Section 1; Part I, Section 2; Part II, Section 2; Part I, Section 3; Part II, Section 3; Part I, Section 4; Part II, Section 4; Part I, Sections 5, 6, 7; Part II, Section 5; Part I, Section 8; Part II, Section 6; Part I, Section 9; Part II, Section 7; Part I, Section 10; Part II, Section 8; Part I, Sections 11, 12; Part II, Sections 9, 10; following the text in regular sequence from Part III.

Third Plan. — Section 1 of Parts I, II, III; Section 2 of Parts I, II, III; Sections 3, 4 of Part III; Sections 3, 4 of Part I; Sections 3, 4 of Part II; Sections 5, 6, 7, 8 of Part I; Sections 5, 6 of Part II; Sections 5, 6 of Part III; Sections 9, 10 of Part I; Sections 7, 8 of Part II; Section 9 of Part III; Sections 11, 12 of Part I; Section 9 of Part II; Section 7 of Part III; Section 10 of Part II; Section 8 of Part III; Section 10 of Part III — then on in regular sequence from Part IV.

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SIGNS AND ABBREVIATIONS

Scale-degrees are indicated by the numbers 1, 2, 3, 4, 5, 6, 7.

Pitch-names are indicated thus: A, B, C, D, E, F, G.

Intervals are spelled out and capitalized, thus: Second, Third, Fourth, Fifth, Sixth, Seventh, Eighth, Ninth.

Chords are written thus: 7th-chord, 9th-chord, 6th-chord.

Constituent parts of chords are indicated as Root, Third, Fifth, Seventh, Ninth.

Major scales or keys are indicated by a bold-face capital Roman letter, thus: A, B, C, etc. Minor keys are indicated by italicized small letter, thus: a, b, c, etc.

Chord-numerals are indicated by the Roman numerals I, II, III, IV, V, VI, VII, which show what degree of the key the chord has as its Root.

Inversions are indicated by the letters "a" and "b" under the chord-numeral. Thus I means a chord on the first degree of the key, the chord not inverted, having as its lowest tone the Root. I indicates that the chord is founded on the tonic, the first degree, and has as its lowest tone the Third. I indicates that the chord is founded on the first degree

of the key, and that it has the Fifth as the lowest tone. The letter "a" indicates first inversion. The letter "b" indicates second inversion.

Seventh-Chords are indicated by the figure 7 to the right of the Roman figure, thus: I⁷, II⁷, III⁷, IV⁷, V⁷, VI⁷, VII⁷. Inversions are indicated in the same way as for three-toned chords: "a" means first inversion, the Third of the chord in the bass; "b" means second inversion, the Fifth of the chord in the bass; "c" means third inversion, the Seventh of the chord in the bass.

Ninth-Chords are indicated by the figures ⁷ and ⁹ to the right of the Roman numeral, thus ; V⁷, V⁹, I⁷, I⁹, etc. Inversions are indicated in the same manner as in 7th-chords.

The **diminished** 7th-chord is indicated by the figure and sign VII^{7°}. When used in key-relation it is indicated by the italicized letter, indicating the minor key. When used as a passing-chord, the key- and chord-indications are enclosed in brackets thus : (*e* VII^{7°}).

The 3-5-6#-chord is indicated $\frac{6}{5}$. The 3-4#-6#-chord is indicated $\frac{6}{4}$. The 6#-chord is indicated $\frac{6}{5}$. The 2-4#-6#-chord is indicated $\frac{6}{2}$.

Dual relations of chords are indicated by two Roman figures, one above the other, thus : I, II, III, V, II⁷, VII⁷
V IV VI VI VI⁷ II⁷

In the first instance this indicates that the I-chord becomes the V-chord in another key ; in the second instance that the II-chord becomes the IV-chord in another key ; in the third instance that the III-chord becomes the VI-chord in another key, etc.

Rhythm in the chord-exercises is indicated by the figures, dashes, dots, ties, double ties. A figure or a dash represents in each case a beat or pulse. If the time is $\frac{4}{4}$, a simple figure or dash represents quarter notes or pulses. If the time is $\frac{6}{8}$, the figure or dash represents beat tones, or eighth notes. If the time is $\frac{4}{2}$, the figure or dash represents a half note, or a beat note. The dashes may represent rests, or the chord indicated by the previous figure may be held throughout the dashes, at pleasure.

Two figures with a single tie represent two notes to a pulse ; in $\frac{4}{4}$ time, two eighth notes ; in $\frac{6}{8}$ time, two sixteenth notes, etc. A dotted quarter note is indicated by a dot after the figure ; when the dot and the succeeding figure are tied together this indicates that the dot and the figure together represent a whole-pulse. A dotted eighth note, followed by a sixteenth, in $\frac{4}{4}$ time, is indicated by a dotted figure with two ties, as seen in example 8, below. All these rhythmical figures and their representation in ordinary note-rhythms appear thus :

1. $\frac{4}{4}$ I II V I | rhythmically equals | ♩ ♩ ♩ ♩ |
2. $\frac{6}{8}$ I - I V - - | " " | ♩ ♩ ♩ · | or | ♩ ♩ ♩ ♩ ♩ ♩ |
3. $\frac{4}{2}$ I - I V | " " | ♩ ♩ ♩ | or | ♩ x x ♩ ♩ |
4. $\frac{3}{4}$ I I \widehat{V} I | " " | ♩ ♩ ♩ ♩ |
5. $\frac{6}{8}$ I I \widehat{V} \widehat{V} I - - | " " | ♩ ♩ ♩ ♩ ♩ · | or | ♩ ♩ ♩ ♩ ♩ ♩ ♩ ♩ |
6. $\frac{4}{4}$ I · I V · \widehat{V} | " " | ♩ · ♩ ♩ ♩ · ♩ |
7. $\frac{6}{8}$ I · \widehat{V} I V - - | " " | ♩ · ♩ ♩ ♩ · | or | ♩ · ♩ ♩ ♩ ♩ ♩ |
8. $\frac{4}{4}$ I · \widehat{I} I I IV | " " | ♩ · ♩ ♩ ♩ ♩ |
9. $\frac{4}{8}$ I V I V | " " | ♩ ♩ ♩ ♩ |

The several key-indications at the beginning of each exercise mean that the student should work these exercises in each of those keys.

HARMONIC PART-WRITING

PART I

TRIADS IN CLOSE HARMONY

SECTION 1

PRINCIPAL TRIADS IN MAJOR

These exercises are to be worked out in close harmony with three notes of the chord in the treble staff, the Root in the bass staff. Each should have at least three versions, as the highest tone may be the Root, Third, or Fifth of the chord; Exs. 2, 3, and 4 may have five or six versions on account of the repeated chords. The student is to compare the versions on the piano and determine by hearing which is best.

There are no rules to be observed, except that common tones are to be retained in the same parts; that is, if the tone C is common to the C-chord and to the F-chord, and this tone is in the soprano of the first chord, it should be retained in the soprano in the next chord; if it is in the alto, let it remain there; and if in the tenor, let it be retained in the same part. Where a chord is repeated, the parts may change as freely as desired.

After the various versions have been written out, away from an instrument, they should be heard and reheard in various keys, at the instrument, because the effect in sound is the final aim.

After the working out is completed, each exercise should be used for *prima vista* playing, using keys different from those in the written exercise.

1. All keys. $\frac{4}{4}$ I IV I V | I - - - || 2. G, E \flat , A. $\frac{3}{4}$ I I V |
 I IV IV | I V V | I - - || 3. F, D \flat , E. $\frac{4}{4}$ I V V I | IV I V - |
 I IV IV I | V V I - || 4. A \flat F \sharp , B \flat . $\frac{3}{4}$ I V V | I IV I |
 V V I | IV - - | I I I | V I IV | I V V | I - - ||

SECTION 2

PRINCIPAL TRIADS IN HARMONIC MINOR

The directions given for Section 1 are to be followed in Section 2. All these exercises are to be in harmonic minor keys. Each figure or dash represents a pulse or beat; where two figures are joined with this sign \frown the note-values are eighths, or two notes to one beat or pulse. Do not forget the final testing of each exercise at the instrument, or the *prima vista* playing in various keys.

5. a, b, g. $\frac{3}{4}$ I I V | I I IV | I IV I | V - - | I V I | IV IV I |
 V V V | I - - || 6. e, f \sharp , c. $\frac{4}{4}$ I I I V | I IV IV I | V I IV - |
 I I I IV | I V V I | IV IV I - || 7. c \sharp , f \sharp , b \flat . $\frac{6}{8}$ I - V I - I |
 V - I IV - - | IV - IV I - V | V - V I - - || 8. g \sharp , e \flat , d \sharp . $\frac{4}{4}$ I V I $\widehat{I\ I}$ |
 V V V $\widehat{I\ I}$ | V I V $\widehat{I\ I}$ | V - - - | I V V $\widehat{I\ I}$ | V V I $\widehat{IV\ IV}$ |
 I I $\widehat{I\ IV}$ $\widehat{I\ V}$ | I - - - ||

SECTION 3

PRINCIPAL AND SUBORDINATE TRIADS IN MAJOR

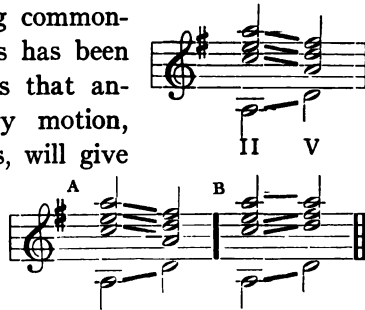
In these exercises the subordinate triads in the major mode are introduced (II, III and VI). Each pair of chords has one, and

sometimes two, tones in common; these common-tones are to be retained in the same respective voices, in the same manner as that observed in the preceding Sections. Where repeated chords occur, the form may vary as desired, though the principle of keeping three notes in the treble staff and one in the bass is to be strictly adhered to. The student is to determine by ear which progression of the bass (Roots) is the best. No doubling other than Roots to be allowed.

Each exercise should be worked out in three forms, (the highest note in the first chord may be the Root, Third, or Fifth), while five versions, on account of the repeated chords, are easily possible for Exs. 10 and 12.

9. G, E \flat , B. $\frac{4}{4}$ I VI IV I | III V II - | VI IV II V | I V I - ||
10. C, F \sharp , A \flat . $\frac{3}{4}$ I V . I | IV II - | II VI . II | VI III - |
VI II . V | I IV - | I V V | I - - ||
11. D, E, B \flat . $\frac{6}{8}$ I - V I VI II |
V - I IV - - | VI - III V II VI | III - V I - - ||
12. A, D \flat , F. $\frac{4}{4}$ I III III VI IV | II V III VI II | V I I VI VI II |
V III VI II V V I ||

So far, the principle of retaining common-tones in the same respective voices has been observed, but it frequently happens that another principle, that of contrary motion, when applied to consecutive chords, will give a better effect than the strict application of the common-tone principle can afford; thus A sounds better than B.



In A, the three upper parts move down while the bass moves up, but in B, the common tone is retained in the same voice, the three other parts moving up in similar motion. In reality, there is an effect of common tone in A, for the tone A is common to both chords, and is merely transferred from the soprano of the first chord to the tenor of the second. This principle of contrary motion is especially good when the bass progresses upward by leaps of Fourths, from II to V, III to VI, I to IV, VI to II, V to I, thus:

A

II III VI I IV VI II V I

B

II V III VI I IV VI II V I

poor

C

II V III VI I IV VI II V I

good

A, where the soprano moves from the Root of the first chord to the Third of the second, gives the best progressions, while C, in which the soprano part moves from the Fifth to the Root is the poorest. The last measure in B is poor on account of the unnatural

progression of the leading-tone, while the last measure of *c* is good on account of the natural progression of 2 to 1. For special reasons of the composer, (the carrying out of a melodic figure, or the continuation of a harmonic sequence), any of the progressions are entirely allowable. When the bass progresses down by a leap of a Fifth, as in *D*, the principles of common-tone retention and of contrary motion are both carried out. A succession of chords in sequence will amply illustrate both principles.



The student should now work out Exs. 9, 10, 11 and 12, each in at least three versions, applying this new principle of contrary motion wherever possible; then compare all his versions, letting the ear decide which one is the best in effect.

These exercises should be used for *prima vista* playing, carrying out, where possible, both methods of chord-connection.

SECTION 4

PRINCIPAL AND SUBORDINATE TRIADS IN HARMONIC MINOR

No new principles are included in Section 4, but some restrictions are necessary in the application of contrary motion. In general, when the bass (Roots) leaps upward by Fourths, as illustrated in Section 3, the three upper parts may move down in contrary motion: some of these progressions in minor are of such a degree of forbidding ugliness as to be practically prohibitive. As was the case

in Section 3, when the soprano has the Root in the first chord followed by the Third in the second chord, as in A, the effect is the best.

A

I IV II V V I III VI

B

I IV II V V I III VI

bad

C

possible I IV good II V bad V I bad III VI

The progressions in B are possible except III to VI, in which similar motion is much better, thus:

III VI

Measure 1 in c is possible, but similar motion for measures 1, 3 and 4 is better than contrary motion, thus:

possible better bad better bad better

I IV V I III VI

It should be noticed that contrary motion in II to V is usually good,

II V I II V I II V I II V I

though similar motion, as in measure 4 of E is better than the contrary motion in measure 3.

From VI to II is generally an ill-sounding progression, though possible, thus:

VI II VI II VI II VI II VI II

In working out the following exercises use both principles, that of common-tone retention and that of contrary motion; being guided by the hints already given, decide by careful comparison, through the hearing, which process or version will give the best results. Each exercise should be worked out in at least three forms, but the principle of three notes in the treble staff with one in the bass should be strictly adhered to. No tones other than Roots to be doubled.

13. *a, g, f.* $\frac{4}{4}$ I V III I | V I V - | V \widehat{V} III VI III: | I III \widehat{V} I - ||
14. *b, c#, e.* $\frac{6}{8}$ I - V I - VI | IV - II V - - |
 I - III VI - IV | II - V I - - ||
15. *c, e^b, f#.* $\frac{2}{4}$ I \widehat{V} I \widehat{I} |
 VI \widehat{IV} II | V III I \widehat{IV} | II \widehat{V} I ||
16. *d, b^b, g#.* $\frac{3}{4}$ I IV . II |
 V III . VI | IV I I | V - - | I V . I | VI II . V |
 III I IV \widehat{IV} | I - - ||

It is the usual custom for theorists to strictly forbid the use of the augmented Second, the skip from 6 to 7, or from 7 to 6 in harmonic minor, but if the prohibition is entirely tenable the harmonic minor scale itself must be abolished. The use of the augmented Second is very common in the works of all representative composers since Bach, and there seems no real reason for its prohibition. Certainly there are times when its use will give a questionable effect, but there are numerous occasions when it is good, as seen in the last measure of E. If the composer desires a certain effect inherent in harmonic minor, or the carrying out of a harmonic or melodic sequence necessitating the use of this interval, there is no one to say him nay. Sane musical judgment in any matter is not to be acquired by rules and regulations issued *ex cathedra*, but is possible only after a long, patient trying of effects, their causes and consequences.

SECTION 5

HARMONIZATION OF MELODIES IN MAJOR

In the harmonization of these melodies, the selection of the accompanying chords is to be made from the material used and illustrated in Section 1 and Section 3. No two chords should be used in succession whose Roots are on contiguous degrees of the

staff. The principles of three notes in the treble staff with one in the bass, common-tone retention, contrary motion, freedom of repeated chords and no duplications other than Roots, should be strictly adhered to.

Each tone in a melody may be the Root, the Third, or the Fifth of a chord, but *which* it shall be can be determined only after careful testing of each in the light of the principles already outlined. It follows naturally that more than one harmonization of each melody is easily possible; for example, Ex. 17 is harmonized in three versions, thus:

The three exercises show different ways to harmonize the same melody. The first exercise uses the following chord degrees: I, V, V, I, I, VI, II, V, V, I, V, V, I, IV, I. The second exercise uses: I, V, II, VI, III, VI, II, V, II, VI, III, V, I, VI, I. The third exercise uses: I, V, II, IV, I, VI, II, II, V, I, V, III, VI, IV, I.

Each exercise should be worked out in at least three versions, the student to determine by hearing and comparison which is best.

The figures in each exercise represent the degrees of the scale

used in the melody. There are no skips here greater than a Fourth. (Where greater skips than Fourths occur, the simple method of indicating such will be shown.)

$$17. E^b, B. \frac{4}{2} \text{ I } 7 \text{ 2 I } | 3 \widehat{3} 4 \text{ 2 - } | 2 \text{ I } 7 \text{ 7 } | \text{ I I I - } ||$$

$$18. C, A^b. \frac{4}{4} 5 \widehat{6} 3 \text{ 5 2 } | 3 \widehat{2} 3 \text{ 4 - } | 4 \widehat{5} 2 \text{ 3 I } | 2 \text{ 7 I - } ||$$

$$19. D, F\#. \frac{3}{4} 3 \text{ - 2 } | 3 \text{ - 4 } | 4 \text{ - 2 } | 3 \text{ - - } | \text{ I - 2 } | 7 \text{ - I } | 4 \text{ - 4 } | 3 \text{ - - } ||$$

$$20. E, B^b. \frac{6}{8} \text{ I - 2 3 - I } | \text{ I - 2 7 - - } | \text{ I - 7 6 - I } | 2 \text{ - 7 I - - } ||$$

$$21. D^b, A. \frac{2}{4} \text{ I } 7 | 6 \text{ 5 } | 6 \text{ 7 } | \widehat{\text{I } 2} \widehat{3 \text{ 2}} | \text{ I } 2 | 3 \text{ 3 } | 4 \text{ 2 } | \widehat{3 \text{ 4 } 3} ||$$

The melody in each of these exercises may be placed in the tenor or the alto, and should now be worked out in that manner.

SECTION 6

HARMONIZATION OF MELODIES IN HARMONIC MINOR

In the selection of the chords that are to accompany these melodies the student is to be guided by the principles outlined in Sections 2, 4 and 5. At least two harmonizations for each exercise should be discovered. In the third measure of Ex. 25, the melody skips up a Sixth, from 6 to 4; this is indicated by a dash over the 4. (If a skip up greater than a Fourth occurs, it will be indicated by a dash over the note to which the melody skips, thus, $\widehat{6}$; while if a downward skip greater than a Fourth occurs, it will be indicated by a dash under the note, thus, $\underset{\sim}{3}$.)

$$22. g\#, e. \frac{4}{4} \text{ I } 7 \text{ I } 5 | 6 \text{ I } 7 \text{ - } | \text{ I } 2 \text{ 3 I } | \text{ I } 7 \text{ I - } ||$$

$$23. b^b, f\#. \frac{6}{8} \text{ I - 2 3 - - } | 3 \text{ - 2 I - - } | 3 \text{ - 2 I - 3 } | 4 \text{ - 2 3 - - } ||$$

$$24. c\#, a. \frac{4}{4} 5 \cdot \widehat{6} 5 \text{ 3 } | 2 \text{ - - - } | 2 \cdot \widehat{7} \text{ I } 2 | 3 \text{ - - - } | 3 \cdot \widehat{4} 4 \text{ 2 } |$$

$$3 \text{ 2 3 - } | \text{ I } \cdot \widehat{\text{I } 2} \widehat{7} | \text{ I } \cdot \widehat{7} \text{ I - } || \quad 25. d, f. \frac{3}{4} 3 \text{ - 2 } | 7 \text{ - I } | 6 \underset{\sim}{4} 2 | 3 \text{ - - } ||$$

26. *e^b, b.* $\frac{4}{4}$ 5 $\widehat{6}$ 4 5 3 | 3 4 5 $\widehat{3}$ 2 | 3 4 5 $\widehat{6}$ 5 | 4 3 2 $\widehat{7}$ 1 ||

The melody of each exercise should now be placed in the tenor, and the exercises rewritten.

SECTION 7

FOREIGN PROGRESSIONS IN MAJOR

“ Foreign Progression ” is the term usually applied to a succession of chords whose Roots lie on contiguous degrees of the staff, as C to D, F to G, A to B, etc. When this is the case no common-tones are present, and the best progression for the upper parts is contrary motion to the bass, as at A. (This is to avoid consecutive Fifths and Eighths which, under these circumstances, usually cause ill-sounding progressions. See foot-note, page 14.) The Third of the first chord may, however, progress in similar motion with the bass, while the Fifth and Root (the doubled Root in one of the upper parts) move in contrary motion to the bass, as at B. This causes the Third to be doubled, and the effect is good in nearly every case. The progressions in A or B are all more or less usable, according to the various preceding or succeeding chords. When IV progresses to V, and then V to I, the doubling of the Third in V, as in the first measure of c, gives an awkward result on account of the two leading-tones; contrary motion between the bass and all the upper parts, as in measure 2 of c, is better. When three or more chords occur whose Roots are contiguous, as in d, there is considerable room for choice in the doubling of the Root or Third, and for similar or contrary motion between the parts. (All of d will sound much more effective if played an Octave lower than written.)

A

II III II III II III III IV III IV III IV

In C. V VI V VI V VI IV V IV V IV V

In G. I II I II I II

B

In C. V VI V VI V VI II III II III II III

In G. I II I II I II

III IV III IV III IV IV V

C

IV V IV V poor IV V I better IV V I

D

I II III IV V VI I II III IV V VI I II III IV V VI

I II III IV V VI I II III IV V VI I II III IV V VI

I II III IV V VI I II III IV V VI I II III IV V VI

Each of the following exercises should now be worked out in several versions, applying the principles outlined for foreign progressions, and the various versions compared at the piano to determine which gives the best effect. In this way the musical judgment will become cultivated. For *prima vista* playing these exercises will be found of incalculable value.

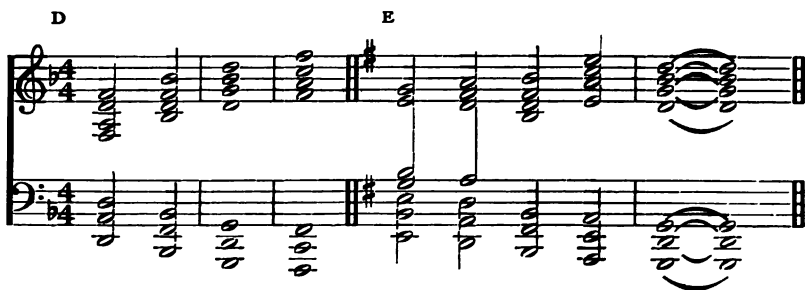
27. G, B, E \flat . $\frac{4}{4}$ I $\widehat{\text{IV V VI IV}}$ | $\widehat{\text{IV V III IV}}$ II - |
 VI $\widehat{\text{II III I VI}}$ | IV V I - || 28. C, F \sharp , D. $\frac{3}{4}$ I V VI | II - V |
 I VI IV | V - - | I VI IV | V III I | II VII V | I - - ||

29. E, B \flat , G \flat . $\frac{2}{4}$ I II | VII - | VII I | VI - | VI VII | V VI |
 IV V | I - || 30. A, F, A \flat . $\frac{6}{8}$ I - IV VI - V | I - III IV - V |
 II V VI IV - V | I - - - - ||

In the four preceding exercises the foreign progressions are all up, while in the four following exercises foreign progressions down or up are illustrated. These will elicit no new principles, but very interesting and striking progressions may be found in at least one version of each exercise.

31. C, D, E. $\frac{3}{4}$ I V VI | V - IV | II III II | V - - | VI V I |
 IV II III | V - V | I - - || 32. F#, A \flat , B \flat . $\frac{6}{8}$ I II I V - VI |
 IV V IV II - - | II III II IV - VII | V III IV I - - ||
 33. F, E \flat , D \flat . $\frac{4}{4}$ I V VI V I - | II VI VII VI II - |
 V VI V III IV V IV I | II V I - || 34. B, A, G. $\frac{4}{4}$ I V IV V II - |
 II VI V VI II - | IV I II VI V II III I | II V I - ||

The musical notation consists of three examples, A, B, and C, each showing a piano accompaniment and a vocal line. Example A is in 4/4 time, Example B is in 4/4 time, and Example C is in 2/2 time. The piano parts are written in bass clef with chords, and the vocal parts are written in treble clef with single notes. Example A shows a progression of chords: C4, D4, E4, F#4, A4, B4, C5, D5, E5, F#5, A5, B5, C6, D6, E6, F#6, A6, B6, C7, D7, E7, F#7, A7, B7, C8, D8, E8, F#8, A8, B8, C9, D9, E9, F#9, A9, B9, C10, D10, E10, F#10, A10, B10, C11, D11, E11, F#11, A11, B11, C12, D12, E12, F#12, A12, B12, C13, D13, E13, F#13, A13, B13, C14, D14, E14, F#14, A14, B14, C15, D15, E15, F#15, A15, B15, C16, D16, E16, F#16, A16, B16, C17, D17, E17, F#17, A17, B17, C18, D18, E18, F#18, A18, B18, C19, D19, E19, F#19, A19, B19, C20, D20, E20, F#20, A20, B20, C21, D21, E21, F#21, A21, B21, C22, D22, E22, F#22, A22, B22, C23, D23, E23, F#23, A23, B23, C24, D24, E24, F#24, A24, B24, C25, D25, E25, F#25, A25, B25, C26, D26, E26, F#26, A26, B26, C27, D27, E27, F#27, A27, B27, C28, D28, E28, F#28, A28, B28, C29, D29, E29, F#29, A29, B29, C30, D30, E30, F#30, A30, B30, C31, D31, E31, F#31, A31, B31, C32, D32, E32, F#32, A32, B32, C33, D33, E33, F#33, A33, B33, C34, D34, E34, F#34, A34, B34, C35, D35, E35, F#35, A35, B35, C36, D36, E36, F#36, A36, B36, C37, D37, E37, F#37, A37, B37, C38, D38, E38, F#38, A38, B38, C39, D39, E39, F#39, A39, B39, C40, D40, E40, F#40, A40, B40, C41, D41, E41, F#41, A41, B41, C42, D42, E42, F#42, A42, B42, C43, D43, E43, F#43, A43, B43, C44, D44, E44, F#44, A44, B44, C45, D45, E45, F#45, A45, B45, C46, D46, E46, F#46, A46, B46, C47, D47, E47, F#47, A47, B47, C48, D48, E48, F#48, A48, B48, C49, D49, E49, F#49, A49, B49, C50, D50, E50, F#50, A50, B50, C51, D51, E51, F#51, A51, B51, C52, D52, E52, F#52, A52, B52, C53, D53, E53, F#53, A53, B53, C54, D54, E54, F#54, A54, B54, C55, D55, E55, F#55, A55, B55, C56, D56, E56, F#56, A56, B56, C57, D57, E57, F#57, A57, B57, C58, D58, E58, F#58, A58, B58, C59, D59, E59, F#59, A59, B59, C60, D60, E60, F#60, A60, B60, C61, D61, E61, F#61, A61, B61, C62, D62, E62, F#62, A62, B62, C63, D63, E63, F#63, A63, B63, C64, D64, E64, F#64, A64, B64, C65, D65, E65, F#65, A65, B65, C66, D66, E66, F#66, A66, B66, C67, D67, E67, F#67, A67, B67, C68, D68, E68, F#68, A68, B68, C69, D69, E69, F#69, A69, B69, C70, D70, E70, F#70, A70, B70, C71, D71, E71, F#71, A71, B71, C72, D72, E72, F#72, A72, B72, C73, D73, E73, F#73, A73, B73, C74, D74, E74, F#74, A74, B74, C75, D75, E75, F#75, A75, B75, C76, D76, E76, F#76, A76, B76, C77, D77, E77, F#77, A77, B77, C78, D78, E78, F#78, A78, B78, C79, D79, E79, F#79, A79, B79, C80, D80, E80, F#80, A80, B80, C81, D81, E81, F#81, A81, B81, C82, D82, E82, F#82, A82, B82, C83, D83, E83, F#83, A83, B83, C84, D84, E84, F#84, A84, B84, C85, D85, E85, F#85, A85, B85, C86, D86, E86, F#86, A86, B86, C87, D87, E87, F#87, A87, B87, C88, D88, E88, F#88, A88, B88, C89, D89, E89, F#89, A89, B89, C90, D90, E90, F#90, A90, B90, C91, D91, E91, F#91, A91, B91, C92, D92, E92, F#92, A92, B92, C93, D93, E93, F#93, A93, B93, C94, D94, E94, F#94, A94, B94, C95, D95, E95, F#95, A95, B95, C96, D96, E96, F#96, A96, B96, C97, D97, E97, F#97, A97, B97, C98, D98, E98, F#98, A98, B98, C99, D99, E99, F#99, A99, B99, C100, D100, 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E235, F#235, A235, B235, C236, D236, E236, F#236, A236, B236, C237, D237, E237, F#237, A237, B237, C238, D238, E238, F#238, A238, B238, C239, D239, E239, F#239, A239, B239, C240, D240, E240, F#240, A240, B240, C241, D241, E241, F#241, A241, B241, C242, D242, E242, F#242, A242, B242, C243, D243, E243, F#243, A243, B243, C244, D244, E244, F#244, A244, B244, C245, D245, E245, F#245, A245, B245, C246, D246, E246, F#246, A246, B246, C247, D247, E247, F#247, A247, B247, C248, D248, E248, F#248, A248, B248, C249, D249, E249, F#249, A249, B249, C250, D250, E250, F#250, A250, B250, C251, D251, E251, F#251, A251, B251, C252, D252, E252, F#252, A252, B252, C253, D253, E253, F#253, A253, B253, C254, D254, E254, F#254, A254, B254, C255, D255, E255, F#255, A255, B255, C256, D256, E256, F#256, A256, B256, C257, D257, E257, F#257, A257, B257, C258, D258, E258, F#258, A258, B258, C259, D259, E259, F#259, A259, B259, C260, D260, E260, F#260, A260, B260, C261, D261, E261, F#261, A261, B261, C262, D262, E262, F#262, A262, B262, C263, D263, E263, F#263, A263, B263, C264, D264, E264, F#264, A264, B264, C265, D265, E265, F#265, A265, B265, C266, D266, E266, F#266, A266, B266, C267, D267, E267, F#267, A267, B267, C268, D268, E268, F#268, A268, B268, C269, D269, E269, F#269, A269, B269, C270, D270, E270, F#270, A270, B270, C271, D271, E271, F#271, A271, B271, C272, D272, E272, F#272, A272, B272, C273, D273, E273, F#273, A273, B273, C274, D274, E274, F#274, A274, B274, C275, D275, E275, F#275, A275, B275, C276, D276, E276, F#276, A276, B276, C277, D277, E277, F#277, A277, B277, C278, D278, E278, F#278, A278, B278, C279, D279, E279, F#279, A279, B279, C280, D280, E280, F#280, A280, B280, C281, D281, E281, F#281, A281, B281, C282, D282, E282, F#282, A282, B282, C283, D283, E283, F#283, A283, B283, C284, D284, E284, F#284, A284, B284, C285, D285, E285, F#285, A285, B285, C286, D286, E286, F#286, A286, B286, C287, D287, E287, F#287, A287, B287, C288, D288, E288, F#288, A288, B288, C289, D289, E289, F#289, A289, B289, C290, D290, E290, F#290, A290, B290, C291, D291, E291, F#291, A291, B291, C292, D292, E292, F#292, A292, B292, C293, D293, E293, F#293, A293, B293, C294, D294, E294, F#294, A294, B294, C295, D295, E295, F#295, A295, B295, C296, D296, E296, F#296, A296, B296, C297, D297, E297, F#297, A297, B297, C298, D298, E298, F#298, A298, B298, C299, D299, E299, F#299, A299, B299, C300, D300, E300, F#300, A300, B300, C301, D301, E301, F#301, A301, B301, C302, D302, E302, F#302, A302, B302, C303, D303, E303, F#303, A303, B303, C304, D304, E304, F#304, A304, B304, C305, D305, E305, F#305, A305, B305, C306, D306, E306, F#306, A306, B306, C307, D307, E307, F#307, A307, B307, C308, D308, E308, F#308, A308, B308, C309, D309, E309, F#309, A309, B309, C310, D310, E310, F#310, A310, B310, C311, D311, E311, F#311, A311, B311, C312, D312, E312, F#312, A312, B312, C313, D313, E313, F#313, A313, B313, C314, D314, E314, F#314, A314, B314, C315, D315, E315, F#315, A315, B315, C316, D316, E316, F#316, A316, B316, C317, D317, E317, F#317, A317, B317, C318, D318, E318, F#318, A318, B318, C319, D319, E319, F#319, A319, B319, C320, D320, E320, F#320, A320, B320, C321, D321, E321, F#321, A321, B321, C322, D322, E322, F#322, A322, B322, C323, D323, E323, F#323, A323, B323, C324, D324, E324, F#324, A324, B324, C325, D325, E325, F#325, A325, B325, C326, D326, E326, F#326, A326, B326, C327, D327, E327, F#327, A327, B327, C328, D328, E328, F#328, A328, B328, C329, D329, E329, F#329, A329, B329, C330, D330, E330, F#330, A330, B330, C331, D331, E331, F#331, A331, B331, C332, D332, E332, F#332, A332, B332, C333, D333, E333, F#333, A333, B333, C334, D334, E334, F#334, A334, B334, C335, D335, E335, F#335, A335, B335, C336, D336, E336, F#336, A336, B336, C337, D337, E337, F#337, A337, B337, C338, D338, E338, F#338, A338, B338, C339, D339, E339, F#339, A339, B339, C340, D340, E340, F#340, A340, B340, C341, D341, E341, F#341, A341, B341, C342, D342, E342, F#342, A342, B342, C343, D343, E343, F#343, A343, B343, C344, D344, E344, F#344, A344, B344, C345, D345, E345, F#345, A345, B345, C346, D346, E346, F#346, A346, B346, C347, D347, E347, F#347, A347, B347, C348, D348, E348, F#348, A348, B348, C349, D349, E349, F#349, A349, B349, C350, D350, E350, F#350, A350, B350, C351, D351, E351, F#351, A351, B351, C352, D352, E352, F#352, A352, B352, C353, D353, E353, F#353, A353, B353, C354, D354, E354, F#354, A354, B354, C355, D355, E355, F#355, A355, B355, C356, D356, E356, F#356, A356, B356, C357, D357, E357, F#357, A357, B357, C358, D358, E358, F#358, A358, B358, C359, D359, E359, F#359, A359, B359, C360, D360, E360, F#360, A360, B360, C361, D361, E361, F#361, A361, B361, C362, D362, E362, F#362, A362, B362, C363, D363, E363, F#363, A363, B363, C364, D364, E364, F#364, A364, B364, C365, D365, E365, F#365, A365, B365, C366, D366, E366, F#366, A366, B366, C367, D367, E367, F#367, A367, B367, C368, D368, E368, F#368, A368, B368, C369, D369, E369, F#369, A369, B369, C370, D370, E370, F#370, A370, B370, C371, D371, E371, F#371, A371, B371, C372, D372, E372, F#372, A372, B372, C373, D373, E373, F#373, A373, B373, C374, D374, E374, F#374, A374, B374, C375, D375, E375, F#375, A375, B375, C376, D376, E376, F#376, A376, B376, C377, D377, E377, F#377, A377, B377, C378, D378, E378, F#378, A378, B378, C379, D379, E379, F#379, A379, B379, C380, D380, E380, F#380, A380, B380, C381, D381, E381, F#381, A381, B381, C382, D382, E382, F#382, A382, B382, C383, D383, E383, F#383, A383, B383, C384, D384, E384, F#384, A384, B384, C385, D385, E385, F#385, A385, B385, C386, D386, E386, F#386, A386, B386, C387, D387, E387, F#387, A387, B387, C388, D388, E388, F#388, A388, B388, C389, D389, E389, F#389, A389, B389, C390, D390, E390, F#390, A390, B390, C391, D391, E391, F#391, A391, B391, C392, D392, E392, F#392, A392, B392, C393, D393, E393, F#393, A393, B393, C394, D394, E394, F#394, A394, B394, C395, D395, E395, F#395, A395, B395, C396, D396, E396, F#396, A396, B396, C397, D397, E397, F#397, A397, B397, C398, D398, E398, F#398, A398, B398, C399, D399, E399, F#399, A399, B399, C400, D400, E400, F#400, A400, B400, C401, D401, E401, F#401, A401, B401, C402, D402, E402, F#402, A402, B402, C403, D403, E403, F#403, A403, B403, C404, D404, E404, F#404, A404, B404, C405, D405, E40



SECTION 8

FOREIGN PROGRESSIONS IN MINOR

In general, the principles applicable to foreign progressions in major are to be observed in minor. The interval of the augmented Second is again encountered, but the principles explained in Section 4 are still entirely tenable. The skip of the augmented Second down, when in the soprano as in measure 2 of A, is bad, though it is possible when in one of the inner parts. This skip up is correct when used as in B, whether it be in the soprano, as is the case in the example, or in one of the inner parts.



possible good good good

V VI V VI VI V VI or I IV III I

Each of the following exercises should be worked out in several forms, applying the principles so far outlined, testing the various versions at the piano to determine which gives the best result.

35. *d, e, f#*. $\frac{6}{8}$ I IV V VI - IV | II III VI IV - - |
 II III VI I II V | IV VI V I - - ||

36. *g, e^b, c*. $\frac{4}{4}$ I \widehat{V} VI \widehat{V} I - |
 II \widehat{III} V \widehat{VI} IV - | VI \widehat{IV} V \widehat{I} IV \widehat{II} V \widehat{VI} | IV III I - ||

37. *a^b, f, b*. $\frac{2}{4}$ I \widehat{V} VI \widehat{V} | I - | II \widehat{IV} V \widehat{IV} | I - | VI \widehat{V} I \widehat{II} | I - |
 II III | I - ||

38. *a, c#, b*. $\frac{3}{4}$ I V VI | IV - II | V - - | VI IV V |
 III - I | II - - | III I II | V - VI | IV - V | I - - ||

SECTION 9

HARMONIZATION OF MELODIES IN MAJOR, WITH FOREIGN PROGRESSIONS

In the selection of the chords that are to accompany these melodies, the student should use only the methods of chord-connection so far outlined and illustrated. Each melody note may be the Root, the Third or the Fifth of the accompanying chord. Each melody may have three harmonizations, all more or less good, while four or five are possible to most of them. All the harmonizations discovered should be compared at the piano to determine which sounds the best.

39. E, A \flat . $\frac{3}{4}$ 3 - 2 | 1 - 2 | 3 3 4 | 2 - - | 1 - 2 | 3 - 3 | 4 4 2 | 3 - - ||
40. D, B \flat . $\frac{4}{4}$ 3 - 4 2 | 3 - 1 - | 1 - 2 - | 3 - - - | 3 - 4 5 | 6 - 5 - |
4 - 2 - | 3 - - - ||
41. B, D \flat . $\frac{3}{4}$ 3 - 2 | 1 - 7 | 6 6 2 | 7 - - | 1 - 7 |
6 - 2 | 3 4 7 | 1 - - ||
42. A, E \flat . $\frac{3}{4}$ 1 - 2 | 7 - - | 1 3 4 | 2 - - |
3 3 4 | 2 3 3 | 2 - 7 | 1 - - ||

Each melody may be placed in one of the inner voices, alto or tenor, and the exercise again worked out.

SECTION 10

HARMONIZATION OF MELODIES IN MINOR, WITH FOREIGN PROGRESSIONS

In selecting the chords that are to accompany these melodies, the student should be guided by the principles so far outlined and illustrated. At least two versions of each exercise should be discovered, and compared at the piano.

The markings in the second and sixth measures in Ex. 44 indicate a dotted eighth note, a sixteenth, and a half, thus:



43. d, g. $\frac{4}{4}$ 1 7 1 $\bar{5}$ | 6 4 5 - | 6 5 5 3 | 4 2 3 - ||
44. e \flat , f \sharp . $\frac{3}{4}$ 5 . 4 5 $\bar{6}$ | 5 . 3 1 - | 1 . 7 1 2 | 3 - - | 4 . 2 3 4 |
5 . 6 5 - | 5 . 7 1 6 | 5 - - ||
45. b, c \sharp . $\frac{6}{8}$ 1 - 5 3 - - | 4 2 4 5 - - |
6 - 5 3 - 4 | 2 1 2 3 - - ||
46. b \flat , e. $\frac{3}{4}$ 1 - 2 | 7 - - | 1 3 4 | 2 - - |
3 3 4 | 2 3 3 | 1 - 7 | 1 - - ||

The melody in each exercise may be placed in one of the inner parts and the exercise again worked out.

SECTION 11

MODULATION FROM MAJOR KEYS INTO RELATED KEYS,
MAJOR AND MINOR

This Section illustrates simple modulations from major keys into related keys, major and minor. The exercises show the modulation from a major key into its dominant key, and return; from major into its subdominant and return; into its relative minor, and return; into the relative minor of its dominant, the mediant, and return; into the relative minor of its subdominant, the supertonic, and return; and into its tonic minor, and return. If C were taken as the initial key, these relations might be shown thus; from C to G and return to C; from C to F and return to C; from C to *a* and return to C; from C to *e* and return to C; from C to *d* and return to C; and from C to *c* and return to C.

In each case the introduction of the new key is made through a chord common to both keys, as shown in Harmony and Ear-Training, Chapter VI, paragraphs 198 to 205. At the point in each exercise where two figures occur, one above the other, the upper figure indicates the chord in the old key, while the lower figure indicates upon which degree this same chord occurs in the new key, the exercise remaining in this new key until a similar marking is reached; for example, Ex. 47 might appear as at A. In the case of the change from the major key into its tonic minor, the V in both keys is identical, yet the same manner of indicating the point of change is used. Ex. 52 with C as the initial key appears at B.

A

I VI IV V III VI V I V I
II /

Exercise 1 (C major, 2/4 time):

I V VI I VI IV V I V I

Exercise 2 (B minor, 3/4 time):

I IV V V VI II

The change from a major key into its tonic minor, or from a minor key into its tonic major, is not a modulation in the real sense of the term, but is simply a change in quality or mode.

In working out these exercises the student should remain entirely within the prescribed limits of the principles explained in this Part. Each exercise should be worked out in at least three versions, and comparisons made at the piano to determine which is the best.

47. **E^b, G.** $\frac{4}{4}$ I - VI IV | V - III - | VI - V - | I V I - |

I - V VI | I - VI - | IV - V - | I V I - ||

48. **F, A.** $\frac{6}{8}$ I - V VI - IV | VI IV V I - - | I - II VI - V |

VI II V I - - || 49. **D, F[#].** $\frac{4}{4}$ I - IV V | VI - IV - | II - V - |

I V I - | I - IV V | VI - IV - | II - V - | I IV I - ||

50. **B^b, D.** $\frac{4}{4}$ I - IV V | $\underset{\text{I}}{\text{III}} - \text{VI} - | \text{IV} - \text{V} - | \text{I V I} - | \text{I} - \text{III VI} |$
 $\text{IV} - \text{IV} - | \text{II} - \text{V} - | \text{I II I} - ||$

51. **C, A^b.** $\frac{6}{8}$ I IV $\underset{\text{I}}{\text{II}}$ V - VI |
 $\text{VI} /$
 $\text{IV} - \text{V I} - - | \underset{\text{II}}{\text{I V VI III}} - \text{IV} | \text{II} - \text{V I} - - ||$

52. **E, G^b, B.** $\frac{2}{4}$ I - IV | $\underset{\text{V}}{\text{V}} - - | \text{V} - \text{VI} | \text{II} - - | \text{III} - \text{VI} | \text{II} - \text{I} |$
 $\text{IV} - \text{II} | \text{I} - - | \underset{\text{V}}{\text{V}} - \text{VI} | \text{III} - - | \text{IV} - \text{V} | \text{II} - - | \text{V III I} | \text{VI} - \text{IV} |$
 $\text{III II V} | \text{I} - - ||$

SECTION 12

MODULATION FROM MINOR KEYS INTO RELATED KEYS,
MAJOR AND MINOR

In this Section, modulation is made from the initial minor key into its dominant minor key and return; from minor to its subdominant minor and return; from minor into its relative major and return; from minor into the relative major of its dominant minor and return; from minor into the relative major of its subdominant minor and return; and from minor into the tonic major and return. For instance, if *c* be taken for the initial key the modulations would be as follows; from *c* to *g* and return; from *c* to *f* and return; from *c* to **E^b** and return; from *c* to **B^b** and return; from *c* to **A^b** and return; and from *c* to **C** and return. As was the case in the preceding Section, the modulation is effected through a chord common to both keys. The student is to keep within the prescribed limits of this Part in working out these exercises. Each exercise should be worked out in at least three versions and these compared to determine which gives the best effect.

53. *d, a.* $\frac{3}{4}$ I IV I | I - V | VI IV V | I - - | IV VI IV | V - VI |
IV / I /

IV II V | I - - || 54. *e, b.* $\frac{3}{4}$ I VI | IV - | V III | I - | IV II | III VI |
I /

IV II | I - | I IV | I - | I V | VI - | V IV | III VI | IV V | I - ||
IV /

55. *f#, c#.* $\frac{6}{8}$ I - V VI - - | IV - V I - - | VI II VII V - I |
II / II /

II - V I - - || 56. *g#, d#.* $\frac{6}{8}$ I - V I - - | I - V I - - |
II /

II I II V - VI | IV - V I - - || 57. *bb, f.* $\frac{3}{4}$ I VI IV | V . III V |
I /

VI VI IV | V . III . V | I III V | VI . IV II | V VI V | I - - ||
I / I /

58. *c, g, eb.* $\frac{3}{4}$ I - V | VI - - | IV - I | V - - | V - V | VI - IV |
V /

II - V | I - - | I - V | VI - - | IV - I | V - - | V - V | VI - IV |
V /

II - V | I - - ||

The exercises in Section 11 and Section 12 will be found of great value for *prima vista* playing at the piano. They should be transposed into various keys, with three forms for the treble part.

PART II TRIADS IN OPEN OR DISPERSED HARMONY

SECTION 1

PRINCIPAL TRIADS IN MAJOR

The working out of these exercises in open or dispersed harmony requires no new principles. Each exercise may be worked out strictly according to the principles in Section 1 of Part I, and then the alto part placed down an Octave, causing it to become the tenor part, while the original tenor part now becomes the alto; thus Ex. 62 might be written as follows in the key of C.

A 1

I IV. I V V- I I I V- I IV. I V V- I- IV I- -

A 2

I IV. I V V I I I V I IV. I V V- I- IV I- -

A 3



A 1 and A 2 are identical except that the alto of A 1 is placed down an Octave in A 2, making it the tenor, while the tenor in A 1 becomes the alto in A 2. The same method is used in A 3 and A 4, and again in A 5 and A 6.

It will be seen from these six versions what a large range of choice is possible even with the simplest material, for these by no means exhaust the possibilities of this one exercise.

In working out the exercises in open harmony, it will be wise to prevent an interval of more than an Octave between the soprano and alto parts, or between the alto and tenor; this restriction does not apply between the tenor and the bass, which may be even two Octaves apart. If the upper parts are separated by more than an

Octave, the effect is usually very thin and weak. Sometimes the best progressions for the bass necessitate the tenor and bass uniting on the same tone. (For the illustrations of these points see A 2, A 4 and A 6.)

Several versions, all in open harmony, should be discovered for each exercise, keeping strictly within the limits of Section I, Part I, regarding common-tones, nothing doubled other than Roots, freedom of repeated chords, and keeping the upper parts within the above mentioned range. The versions should be compared at the piano to determine which gives the best result in sound. For *prima vista* playing in various keys at the piano, these exercises will be found of great value.

59. G, B, D. $\frac{3}{4}$ $\widehat{\text{I}} \widehat{\text{I}} \text{V} - | \widehat{\text{I}} \text{IV} \text{IV} - | \text{I} - \widehat{\text{V}} \widehat{\text{V}} | \text{I} - - ||$
60. D \flat , F, A \flat . $\frac{6}{8}$ $\text{I} \text{V} \text{V} \text{I} - - | \text{IV} - \text{I} \widehat{\text{V}} \widehat{\text{I}} \text{V} - | \text{I} \text{IV} \text{IV} \widehat{\text{I}} \widehat{\text{IV}} \text{I} - | \text{V} - \text{V} \text{I} - - ||$
61. A, F \sharp , B \flat . $\frac{4}{4}$ $\text{I} - \text{V} \text{V} | \text{I} . \widehat{\text{IV}} \text{I} - | \text{V} - \text{V} \text{I} | \text{IV} - - - | \text{I} - \text{I} \text{I} | \text{V} . \widehat{\text{I}} \text{IV} - | \text{I} \text{V} - \text{V} | \text{I} . \widehat{\text{IV}} \text{I} - ||$
62. G \flat , E, A \flat . $\frac{3}{4}$ $\text{I} \text{IV} . \widehat{\text{I}} | \text{V} \text{V} - | \text{I} \text{I} \text{I} | \text{V} - - | \text{I} \text{IV} . \widehat{\text{I}} | \text{V} \text{V} - | \text{I} - \text{IV} | \text{I} - - ||$

It will be excellent practice to write numerous exercises in open harmony for voices, in score, soprano, alto, tenor and bass, as at A; use the tenor clef sign on the third space for the tenor part, as it is so often done in modern vocal score. This places middle C on the third space, causing the tenor part to be written an Octave higher than it sounds, or sounding an Octave lower than written. It will also be excellent practice to write these exercises for string quartet in score as at B, for first violin, second violin, viola and cello, using the regular viola clef sign for that part. This places middle C on the third line.

Ex. 62, version A 2 in vocal score.

A SOPRANO

ALTO

TENOR

BASS

Ex. 62, version A 6, in string quartet score.

B 1ST VIOLIN

2ND VIOLIN

VIOLA

CELLO

OPEN AND CLOSE HARMONY IN ALTERNATION

It is not necessary to limit an entire exercise to open or to close harmony forms, for the two methods of voice-disposition may alternate in the same exercise, part being in open, and part in close harmony. Thus the melody in the A 1 or the A 2 version of Ex. 62 may be harmonized as in A 7 or A 8, partly in open, and partly in close harmony, giving variety and more melodic content to the

inner parts. This allows more room for choice in arranging the harmonization of a melody or the melodization of a harmony, as Ex. 62 now appears in eight versions (with still one more in A 9), in all of which the harmony is kept intact, with all the chords in fundamental form, and the strict principles of preceding Sections still adhered to. Other versions for the same harmony are easily discoverable within the limits of the few principles so far explained.

At least two versions of Exs. 59 to 62 should now be arranged, with alternations in each between close and open harmony, making the inner parts as melodious and as singable as possible.

Ex. 62, version A 7.

Ex. 62, version A 8.

THE DUPLICATION AND OMISSION OF CERTAIN TONES

(These advanced principles may be omitted for a time, if the class is not ready for them. The teacher is the only judge in such cases.)

Up to this point, in the working out of exercises with principal triads, no duplications other than Roots have been allowed, (except

in Sections 7 and 8 in Part I, where foreign progressions are illustrated), nor has the omission of any tone been allowed.

In good part-writing it is not necessary to exclusively limit duplications to the Root, nor is it necessary to have every tone of a chord present under all circumstances. The Third or the Fifth of a chord may be doubled, the Root may be trebled or even quadrupled, while the Fifth, and sometimes the Third and the Fifth in the final chord of an authentic cadence, may be omitted. These principles are illustrated thus.

1 2 3 4

I I V I IV IV I IV IV I IV I V

5 6 7 8

I I V I I V I I I V I I IV

9 10 11

I V V I I V V I I V V I

The musical score consists of three systems, each with a treble and bass staff. The notes are written in a simplified manner, often using vertical stems with dots or flags to represent chords. Roman numerals are placed below the treble staff to indicate the harmonic structure.

System 1 (Measures 12-15):

- Measure 12: Treble (I V V I), Bass (I V V I)
- Measure 13: Treble (I V V I), Bass (I V V I)
- Measure 14: Treble (I V V I), Bass (I V V I)
- Measure 15: Treble (I V V I), Bass (I V V I)

System 2 (Measures 16-19):

- Measure 16: Treble (I V V I), Bass (I V V I)
- Measure 17: Treble (I V V I), Bass (I V V I)
- Measure 18: Treble (I V V I), Bass (I V V I)
- Measure 19: Treble (I V V I), Bass (I V V I)

System 3 (Measures 20-23):

- Measure 20: Treble (I V V I), Bass (I V V I)
- Measure 21: Treble (I V V I), Bass (I V V I)
- Measure 22: Treble (I V V I), Bass (I V V I)
- Measure 23: Treble (I V V I), Bass (I V V I)

The word "bad" is written below the bass staff in measure 23.

In the above examples, from the first to the tenth segment, except five and seven, also in the thirteenth, sixteenth, eighteenth and nineteenth, the Root is trebled and the Fifth omitted. In the seventh, fourteenth, fifteenth and seventeenth segments the Root and Third are both doubled, and the Fifth omitted. In the eleventh, twelfth, and thirteenth segments the Root is quadrupled, and the Third and Fifth both omitted. In the fifth and sixth segments the Third is doubled, while one Root and one Fifth are present. In the nineteenth segment the Fifth is doubled. In each case the effect is good and entirely legitimate. The doubling of the Fifth is usually the one to avoid, while the Third in V when

used in a cadence into I as at segment 23, or otherwise, is bad on account of its tendency as leading-tone.

When the doubled tone occurs between the tenor and alto, or between the tenor and soprano, or between the alto and soprano, the best procedure is to approach and leave the doubled tone, whether it be an Octave or a Prime, by contrary or oblique motion, though this principle is not obligatory under all circumstances. (Oblique motion is the term applied when one voice remains stationary while another moves.) This principle is illustrated in segments two to nine, in thirteen to fifteen, and in eighteen and nineteen. The bass part is usually freer, but in the majority of cases if the Octave is approached by similar motion it is better to leave it by contrary or oblique motion. In a final cadence, as in segments nine to twenty-two, any kind of motion, and all duplications may be allowed, except the doubled Third in V, as in segment twenty-three. The unison passages in segments twenty, twenty-one, and twenty-two are very good, making strong and forcible cadences.

In version A 9 of Ex. 62, some of these methods of duplication and omission are exemplified, resulting in greater freedom and individuality for the three upper parts.

Ex. 62, version A 9.



The various versions of Exs. 59 to 62, as well as those for Exs. 1 to 4 should now be rearranged with these new principles as guides, more melodious and singable parts for the three upper voices being sought.

SECTION 2

PRINCIPAL TRIADS IN MINOR

The exercises here may be worked out in close harmony (three voices in the treble clef with the Roots in the bass) strictly according to the principles of Section 2 in Part I, and then the alto placed down between the bass and tenor parts, causing the alto to become tenor while the original tenor part now becomes alto; this is exactly the same procedure as that followed in Section 1 of this Part.

No interval greater than an Octave should occur between the alto and the soprano, nor between the alto and tenor. When the treble and bass clefs only are used, the alto and soprano parts should be written on the treble staff, with the tenor and bass on the bass staff. At least three versions for each exercise should be discovered.

3. *d, f, g#*. $\frac{3}{4}$ $\widehat{\text{I}} \widehat{\text{I}} \text{I} \cdot \widehat{\text{V}} \mid \widehat{\text{I}} \widehat{\text{IV}} \text{IV} \cdot \widehat{\text{I}} \mid \text{V} \text{I} \text{I} \mid \text{V} - - \mid \widehat{\text{I}} \widehat{\text{I}} \text{I} \cdot \widehat{\text{IV}} \mid$
 $\widehat{\text{I}} \widehat{\text{V}} \text{V} \cdot \widehat{\text{I}} \mid \text{V} \text{I} \widehat{\text{IV}} \widehat{\text{IV}} \mid \text{I} - - \parallel$

64. *e, g, b^b*. $\frac{3}{4}$ $\text{I} \text{I} \cdot \widehat{\text{V}} \mid \widehat{\text{I}} \widehat{\text{I}} \widehat{\text{IV}} - \mid$
 $\widehat{\text{I}} \widehat{\text{IV}} \text{I} \text{I} \mid \text{V} - - \mid \text{I} \text{V} \cdot \widehat{\text{I}} \mid \widehat{\text{IV}} \widehat{\text{IV}} \text{I} - \mid \widehat{\text{V}} \widehat{\text{I}} \text{V} \text{V} \mid \text{I} - - \parallel$

65. *f#, a, c#*. $\frac{4}{4}$ $\text{I} \cdot \widehat{\text{V}} \text{I} \text{I} \mid \text{V} \cdot \widehat{\text{I}} \widehat{\text{IV}} - \mid \text{IV} \cdot \widehat{\text{I}} \widehat{\text{IV}} \widehat{\text{IV}} \mid \widehat{\text{I}} \widehat{\text{I}} \text{V} \text{I} - \parallel$

66. *e^b, b, g*. $\frac{3}{4}$ $\widehat{\text{I}} \widehat{\text{V}} \text{I} \widehat{\text{I}} \text{I} \mid \widehat{\text{IV}} \widehat{\text{IV}} \text{I} \widehat{\text{IV}} \widehat{\text{IV}} \mid \text{I} \widehat{\text{IV}} \text{I} \mid \text{V} - - \mid$
 $\widehat{\text{I}} \widehat{\text{V}} \text{V} \widehat{\text{I}} \widehat{\text{IV}} \mid \widehat{\text{I}} \widehat{\text{V}} \text{V} \widehat{\text{I}} \widehat{\text{IV}} \mid \widehat{\text{I}} \widehat{\text{I}} \widehat{\text{I}} \widehat{\text{V}} \widehat{\text{I}} \widehat{\text{IV}} \mid \text{I} - - \parallel$

OPEN AND CLOSE HARMONY IN ALTERNATION

Each exercise may be rearranged, with open and close harmony alternating, as explained in the corresponding division in Section 1. At least two different versions for each exercise should now be discovered with this principle as a guide, the student attempting to make the upper parts as melodious and as individual as possible.

THE DUPLICATION AND OMISSION OF CERTAIN TONES

The tones of the principal triads in minor may be duplicated or omitted in the same manner as in the major mode, as illustrated and explained in the corresponding division of Section 1. The omission of the Fifth of the minor chords I and IV, gives a result that is not as satisfactory as the omission of the Fifth of a major chord. The reasons for this are given in Harmony and Ear-Training, Paragraphs 101-103, 128, 134-138, 141-143, and 645-653.

Rearrangements of Exs. 63 to 66 should now be made, with duplications and omissions of tones, the student attempting to improve the versions already discovered.

SECTION 3**PRINCIPAL AND SUBORDINATE TRIADS IN MAJOR**

These exercises may be worked out entirely in accord with the mechanical principles of common-tones, no duplications other than Roots, etc.; or according to the more flexible principles of contrary motion, duplications and omissions of tones, and freedom in movement of the upper voices as explained in Section 3 of Part I, and Section 1 of Part II.

The duplication or omission of tones of the subordinate triads is governed by the principles explained in Sections 1 and 2 of Part II. When the bass, or Roots, follow a definable sequence as in Exs. 68, 70, and 71, the student should discover equally good, or better sequences in the form of melodies for the upper parts. Each exercise may be worked out entirely in open harmony, or the open and close harmony forms may alternate, the guiding consideration in every case being the discovery of singable upper parts. Several versions for each exercise should be discovered and compared to determine which is best.

67. G, A, E. $\frac{4}{4}$ I - VI IV | II - V - | V - III VI | II - - - |
 V - I III | VI - IV - | II - V - | I IV I - ||
68. E \flat , F, C. $\frac{3}{4}$ I . $\widehat{\text{V}}$ I I |
 IV II - | II . $\widehat{\text{VI}}$ II II | V III - | III $\widehat{\text{VI}}$ II . $\widehat{\text{V}}$ | II $\widehat{\text{V}}$ I . $\widehat{\text{IV}}$ |
 VI II V | I - - ||
69. B, C \sharp , A \flat . $\frac{2}{4}$ I - | III - | VI - | II II | II - |
 IV - | VII - | III III | III - | V - | I - | IV IV | I - | V - | V - | I - ||
70. F \sharp , D, B \flat . $\frac{3}{4}$ I . $\widehat{\text{V}}$ I VI | IV $\widehat{\text{IV}}$ II - | II . $\widehat{\text{VI}}$ II V |
 $\widehat{\text{V}}$ $\widehat{\text{V}}$ III - | III $\widehat{\text{VI}}$ II II | II $\widehat{\text{V}}$ I I | VI - IV | I - - ||
71. E, G \flat , D \flat . $\frac{4}{4}$ I VI | IV - II VII | V - III I | VI IV II V |
 I - I III | V - II IV | VI - III VI | IV II V V | I - ||

SECTION 4

PRINCIPAL AND SUBORDINATE TRIADS IN MINOR

The directions for Section 3 are here applicable. In addition it should be noted that the leading-tone in minor is nearly always a poor tone to double. When the chord on VII is used and some tone is to be doubled, the Third of the chord is the one to select.

Each exercise should be worked out in several forms and the versions compared to determine which gives the best result. Open and close harmony may alternate, or the entire exercise may be kept in open harmony, the guiding principle again being the discovery of melodious, singable, and individual parts.

72. d, g, f. $\frac{3}{4}$ I $\widehat{\text{V}}$ I I | VI VI - | IV $\widehat{\text{I}}$ IV II | V III - | VI $\widehat{\text{III}}$ VI IV |
 II V - | I - IV | I - - ||
73. e \flat , a \flat , c. $\frac{4}{4}$ I . $\widehat{\text{III}}$ VI IV | II V III I |
 I . $\widehat{\text{V}}$ I IV | VI IV I - ||

74. *c#*, *f#*, *a*. $\frac{3}{4}$ $\widehat{\text{I VI}} \mid \text{IV} - \widehat{\text{II VII}} \mid \text{V} - \widehat{\text{III I}} \mid \text{VI IV} \widehat{\text{II V}} \mid$
 $\text{I} - \widehat{\text{I III}} \mid \text{V} - \widehat{\text{II IV}} \mid \text{VI} - \widehat{\text{III VI}} \mid \text{IV II} \widehat{\text{V V}} \mid \text{I} - \parallel$
75. *f*, *b♭*, *e*. $\frac{4}{2}$ $\text{I} \cdot \widehat{\text{III III I}} \mid \text{VI} \cdot \widehat{\text{I I VI}} \mid \text{IV VI VI IV} \mid \text{I} - - - \mid$
 $\text{IV} \cdot \widehat{\text{VI VI IV}} \mid \text{II} \cdot \widehat{\text{IV II VII}} \mid \text{V} - \text{V} - \mid \text{I IV IV I} - \parallel$

SECTION 5

FOREIGN PROGRESSIONS IN MAJOR

No new principles are included here, as those explained and illustrated in Section 7, Part I, and the preceding Sections of this Part are all that are necessary. As modern music is so largely a "Melodization of Harmony" the student should seek for distinct and individual parts for the upper voices. To accomplish this, he may use open and close harmony in alternation, contrary or similar motion; the common-tones may be retained or transferred to another voice, and duplications and omissions of tones may be used as occasion demands.

Several versions for each exercise should be discovered and compared.

76. *D*, *A♭*. $\frac{4}{4}$ $\text{I} - \text{IV V} \mid \text{VI} - \text{III} - \mid \text{IV V III IV} \mid \text{I} - - - \mid$
 $\text{II} - \text{V VI} \mid \text{V} - \text{III} - \mid \text{IV} - \text{II} - \mid \text{I} - - - \parallel$
77. *B♭*, *E*. $\frac{3}{4}$ $\text{I II I} \mid$
 $\text{V} - \text{VI} \mid \text{IV V IV} \mid \text{II} - - \mid \text{II III II} \mid \text{VI} - \text{VII} \mid \text{V III IV} \mid \text{I} - - \parallel$
78. *F#*, *D♭*. $\frac{4}{4}$ $\text{I VI} \mid \text{V} - \text{II VII} \mid \text{VI} - \text{III II} \mid \text{I III} \widehat{\text{IV IV VI}} \mid$
 $\text{V} - \text{I III} \mid \text{IV} - \text{VII II} \mid \text{III} - \text{VI I} \mid \text{II V I V} \mid \text{I} - \parallel$
79. *A*, *E♭*. $\frac{6}{8}$ $\text{I V VI II} - \text{V} \mid \text{I IV VI V} - - \mid \text{VI III IV III} - \text{VI} \mid$
 $\text{IV} - \text{V I} - - \parallel$
80. *G*, *B♭*. $\frac{3}{4}$ $\text{I} - \text{VI} \mid \text{IV} - \text{V} \mid \text{I III IV} \mid \text{V} - - \mid$
 $\text{VI} - \text{IV} \mid \text{II} - \text{III} \mid \text{I II V} \mid \text{I} - - \parallel$

The "Melodization of Harmony" means that the harmonies accompanying a melody are an inseparable part of such melody. If the particular harmonies accompanying a melody be changed the melody itself will have lost its character. The harmonies are not a mere background in a picture in which a melody is supreme; instead, the harmonies and the inner melodies arising therefrom are in the foreground, and are as much a "subject" as the melody. In modern appreciation, "harmonic idea," or the "harmonic motive" has come to be a distinct entity, the melodic motive no longer being supreme. The selection and development of the harmonic motive is a subject demanding constant attention on the part of the student, whether he be a beginner or a more mature composer.

SECTION 6

FOREIGN PROGRESSIONS IN MINOR

The general directions given in Section 5 are here applicable. As the minor mode contains so many more dissonant intervals than the major, greater care is necessary to insure melodious and musical upper voice-parts.

81. b^b, c^\sharp . $\frac{4}{4}$ I. $\widehat{V} VI V | I. \widehat{IV} I - | VI. \widehat{I} IV VI | IV. \widehat{V} VI - |$
 $IV. \widehat{II} III I | IV. \widehat{I} I VI | V - IV - | I - - - ||$
82. e, g^\sharp . $\frac{6}{8}$ I - VI IV - V | I III VI V - - | V - III I - VI |
 V IV V I - - || 83. c, f^\sharp . $\frac{3}{4}$ I - V | VI - IV | V - II | III II - |
 I - II | III - VI | VI IV V | I - - || 84. a, f . $\frac{3}{4}$ I V VI | IV - II |
 V - - | VI IV V | III - I | II - - | I II III | VI - IV | V V III | I - - ||

SECTION 7

MELODIES IN MAJOR

The harmonization of these melodies will require no new principles; those explained and illustrated in preceding Sections may enter into the working out of these problems, as occasion demands. Several versions for each melody should be discovered, and these compared to determine which gives the best result.

In melodies which begin on a non-accented pulse, or on the dominant, or with a tone belonging to the dominant chord, as in Exs. 88, 89, 91, 92, 93, and 94, the opening tone or tones may be taken by the soprano alone as in 89 B and 92 A; or they may be sung in unison as in 88 A, 89 D, 91 A, 92 B, and 94 A; or chords may accompany these tones as in 89 C, 91 B, 92 C, 93 A and 93 B, and 94 B.

88 A 89 B 89 C 89 D

91 A 91 B 92 A 92 B 92 C

93 A 93 B 94 A 94 B

MELODIES

85



86



87



88



89



90



91



92



93



94



SECTION 8

MELODIES IN MINOR

The harmonization of these melodies requires no new principles; those of preceding Sections may be applied as occasion warrants. Several versions for each melody should be discovered, and these compared to determine which is best.

95



96

97

98

99

100

SECTION 9

MODULATION

All the exercises in Section 11 and Section 12 of Part I should be rearranged in open harmony with alternations between open and close harmony, and with various omissions and duplications of tones, as explained and illustrated in the preceding Sections of this Part.

The following exercises are from an initial key into various other keys more or less remotely related to this initial key, through the relations of chords common to the various keys. Some of the modulations require enharmonic changes in the common chord, but the figuring points the way in each case. Several versions for each exercise are possible, while at least two may be discovered that will yield a very satisfactory result.

101. E, C, B \flat . $\frac{3}{4}$ I II V | $\overset{\text{II}}{\text{VI}} - \overset{\text{IV}}{\text{V}} | \text{I I } \overset{\text{IV}}{\text{IV}} \overset{\text{II}}{\text{II}} | \text{V} - - | \text{V } \overset{\text{II}}{\text{VI}} \overset{\text{II}}{\text{IV}} |$
 $\text{I I } \overset{\text{V}}{\text{III}} | \text{IV II V} | \text{I} - - ||$ 102. A \flat , F \sharp , D. $\frac{4}{4}$ I I | V - V V |
 $\text{I} - \overset{\text{IV}}{\text{I}} \text{V} | \overset{\text{II}}{\text{I III I V}} | \overset{\text{IV}}{\text{I} - \text{I V}} | \overset{\text{IV}}{\text{V} - \text{VI V}} | \overset{\text{I}}{\text{I} - \text{V V}} | \overset{\text{I}}{\text{V IV V}} \overset{\text{VI}}{\text{VI}} \overset{\text{II}}{\text{II V}} | \text{I} - ||$
103. A, D \flat , B. $\frac{3}{4}$ I . $\overset{\text{V}}{\text{V}}$ I . $\overset{\text{I}}{\text{I}}$ | $\overset{\text{V}}{\text{I . V}}$ I . $\overset{\text{I}}{\text{I}}$ | $\overset{\text{minor}}{\text{VI}} \overset{\text{III}}{\text{V I VI}} |$
 $\overset{\text{II}}{\text{II . V I}} - | \overset{\text{IV}}{\text{VI . VI V . V}} | \overset{\text{I}}{\text{IV . I V . V}} | \overset{\text{IV}}{\text{II . II VI . IV}} | \overset{\text{V}}{\text{V . V I}} - ||$
104. c, e \flat , a. $\frac{3}{4}$ I - I | $\overset{\text{III}}{\text{IV} - \text{IV}} | \text{V I IV} | \text{V} - - | \text{III} - \text{III} |$
 $\text{VI} - \text{VI} | \overset{\text{I}}{\text{VI VI IV}} | \text{V} - - | \overset{\text{IV}}{\text{I} - \text{I}} | \overset{\text{IV}}{\text{I} - \text{I}} | \text{I V III} | \text{VI} - - | \text{II} - \text{V} |$
 $\text{III} - \text{VI} | \text{II V IV} | \text{I} - - ||$ 105. b, d, c \sharp . $\frac{2}{4}$ I I | $\overset{\text{I}}{\text{V V}} | \overset{\text{I}}{\text{V VI IV}} |$
 $\text{V} - | \overset{\text{I}}{\text{V V}} | \overset{\text{I}}{\text{V VI}} | \overset{\text{I}}{\text{VI IV V}} | \text{VI} - | \overset{\text{I}}{\text{IV IV}} | \overset{\text{I}}{\text{V V}} | \overset{\text{I}}{\text{VI II II}} | \overset{\text{IV}}{\text{VI}} - |$
 $\text{IV III} | \text{VI VI} | \overset{\text{I}}{\text{II III V}} | \text{I} - ||$

SECTION 10

BORROWED TONES AND CHORDS. CHORD-SUBSTITUTION
WITHOUT DESTRUCTION OF THE "KEY-CENTRE"

(Before these subjects are taken up the student should become quite familiar with Paragraphs 520 to 549 inclusive, of Harmony and Ear-Training.)

In example A, page 41, the melody proceeds strictly according to the key of C, without deviation to the right or left, no "side-stepping" being allowed.

While the term "side-stepping" may be condemned as slang, yet it expresses and conveys the meaning more clearly than any other English term discoverable.

In example B the main essentials, melodically and harmonically, of example A are kept intact, but it is much more graceful and pleasing. Some deviations from the path of strict diatonic rectitude are permitted, and the result is a decided improvement on its puritanical predecessor in A. The foreign tones in B, (F#, G#, D#, C#, and A#) do not belong to the key of C, but are "borrowed" from nearly related keys; the F# is "borrowed" from the dominant key; the G# is "borrowed" from the relative minor; the D# is "borrowed" from the relative minor of the dominant key; the C# is "borrowed" from the relative minor of the subdominant; and the A# (its enharmonic equivalent Bb) is "borrowed" from the subdominant key.

Persons who cannot rid themselves of the notion that A# and Bb are different tones and therefore cannot accept the latter "borrowed" tone, may rest easy, for A# may be considered as a "borrowed" tone from the dominant major to the relative minor of the original dominant. It is the custom for "theorists" of various kinds to insist that there is a distinct difference between enharmonic tones, citing as proof violinists and other string players who claim to make these differences in playing their instruments. If such players really do make these differences, then they play much out of tune when playing with piano, with orchestra, or with any instruments tuned according to the tempered scale. On the other hand, if these players do play in tune when playing with piano, orchestra, or tempered instruments, then it is impossible to make the enharmonic differences. There is no possible middle ground of compromise.

Most emphatically these "borrowed" tones are not "raised 4, raised 5, raised 2, raised 1, and raised 6" of the key of C, for if they are, then the key of C is a chromatic key as all the chromatic tones are in the example. Nevertheless, the tone C is the accept-

able, final **point of repose** for the whole phrase, and the key of **C** is the "**key-centre**" for the whole. All the keys from which the "borrowed" tones are taken are closely related to the "**key-centre**," but the deviations are so brief, the "side-stepping" so transitory, that the main harmonic path of the melody is not interfered with. These "borrowed" tones are mere harmonic or melodic embellishments, mere passing tones, or tones of but passing importance.



This principle of "borrowing" tones may be extended to chords; thus example c is entirely within the limits of **C**, while example d "side-steps" into related keys, but not sufficiently so as to entirely displace **C** as the "Key-Centre," or **C** as the Point of Repose. The augmented chord on **G** in the first and seventh measures of example d is "borrowed" from the relative minor of the dominant key, and is "substituted" for the major chord on **V**. The augmented chord on **C** in the second and third measures is "borrowed" from the relative minor key, and is "substituted" for the major chord on the tonic, **I**. The major chord on **D** in the fourth measure is "borrowed" from the dominant key, and is "substituted" for the minor chord on **II**. The major chord on **E** in the fifth measure is "borrowed" from the relative minor key, and is "substituted" for the minor chord on **III**.

These "borrowed" or "substituted" chords clearly suggest other keys, as the markings under the example show, but the modulations are so brief and so transitory in character that the "Key-Centre" is not sufficiently displaced for the ear to lose C as the ultimate Point of Repose. Nevertheless, these "borrowed" chords **do not** belong to the key of C, and it is entirely false to name them "altered major or minor chords in the key of C," for they are not such, any more than a foot extended by an inch, or shortened by an inch, is an "altered foot."

C

D

C I ϵ III VI α III VI III VI GV I α V VI IV ϵ III VI
C I

There is no difference whatever between these very transitory modulations and permanent modulations, except that in a transitory modulation the new Point of Repose is merely suggested, not fixed, while in a permanent modulation the new Point of Repose is not only indicated but is definitely fixed.

In example E, the "borrowed" chords are produced from chromatic passing tones. In the sixth and seventh measures are seen two chords "borrowed" from the tonic minor key, and "substituted" for the chords on corresponding degrees of the major key.



To the accepted principles of passing tones, and passing chords, should be added the principle of "passing keys," suggestions of new keys different from the chosen "Key-Centre" but not permanently fixing a new "Key-Centre," or destroying the old "Key-Centre."

In example F the path of strict diatonic rectitude is kept with the usual result of stiffness, while in example G the "borrowed" chords or the "passing keys" make the phrase much more musical and pliant. The "passing keys" are indicated by the figuring under the example. In example H the first and third chords in each measure, excepting the seventh, belong to the key of C, and the "passing keys" are indicated under the example. In example I some of the "passing keys" are so far removed from the original key as to completely destroy the original "Key-Centre," and C is accepted by the ear as the final Point of Repose simply because all the elements of the "Key-Centre" C are heard in the last seven chords.



G

C I V I *d* V I V I *e* V I V I IV IV V
C III VI /

G I V I *a* V I V I V VI IV V V I
C IV II

H

C I V I *d* V I V I *e* V I V I F V I V I G V

I V I *a* V I V I *b* V I V I C V I V I

I

C I V I D V I V I E V I V I IVF#I II

A♭ I V I B♭ V I V I C V I V VI II V I

Example j shows a "borrowed" or "substituted" minor chord on IV in the place of the major chord on that degree, while example k shows a "substituted" minor chord on V in the place of the major chord.

J K

Certainly the chords in example i cannot be considered "Altered Chords in the key of C," nor can the chords causing the brief transitions, the "passing-keys," in examples H, G, E and D be so explained, for the principle involved in each is identical, and the result would be complete loss of "key-entity."

Every chord is a distinct entity in itself; these entities may be combined in a manner which prevents a key-entity from emerging, or becoming fixed, as in the exercise at the top of page 46.



Or again, the chord-entities may be combined in a manner that causes definite key-entities to emerge, these merely being suggested, or lasting a longer time as the composer wills. Again, these key-entities may succeed one another very rapidly, being mere suggestions, causing a kaleidoscopic effect in tone-color, with constant shifting of the key Point of Repose.

The whole "theory" of "Altered Chords" and its attendant misconceptions is false, having no factual foundation whatever.

Nearly all the exercises of preceding Sections, melodic and harmonic, are susceptible of improvement by the application of "borrowed" tones and "borrowed" chords, with brief transitions or "passing-keys." The student should experiment with many of these until the best solutions are discovered. A word of caution is necessary, for too much shiftiness in key-centres will result in harmonic incoherence and harmonic shiftlessness, and, as stated in preceding Sections, the selection of a good harmonic framework is a very necessary matter.

PART III

INVERTED CHORDS

SECTION 1

PRINCIPAL CHORDS IN MAJOR

The first and second inversions of chords are indicated with the letters "a" or "b" under the degree-numeral; thus I indicates the tonic chord with the Root in the bass; I indicates the tonic chord with the Third in the bass; and I^a indicates the tonic chord with the Fifth in the bass. The letter "a" under the degree-numeral signifies that the chord is in first inversion, while the letter "b" under the degree-numeral signifies that the chord is in the second inversion.

The use of inverted chords will obviate the rather ungainly progressions of the bass necessitated by fundamental chords in Parts I and II, and will permit the bass to become as melodious as any one of the three upper voices. Next to the soprano, the bass should be the most melodious and singable part.

As the Third is in the bass when the first inversion of the principal chords is used, it is not advisable to double it in any other part; instead, the Root of the tonic chord may be doubled, as in A, E, F, G, H, I, J, Q, R, S, JJ, KK, LL, and MM below, the Root of the dominant chord as in B, P, Q, R, S, T, U, V, W, X, JJ, LL, and MM, and the Root of the subdominant chord as in C, D, and the second measure of T; or the Fifth of the tonic chord may be doubled as in B, O, P, and T, the Fifth of the dominant as in A, and O, and the Fifth of the subdominant as in NN, OO, PP, and QQ.

In the second inversion of the tonic and subdominant chords the Root, Third, or Fifth may be doubled as seen in C, D, E, F, G, I,

J, K, L, M, N, AA to II, and NN to TT, but when the tonic chord in second inversion is used in a half or an authentic cadence the Fifth is the better tone for doubling. In second inversion the Root or the Fifth of the dominant chord may be doubled, but as the Third is the leading-tone it had better be avoided as a doubled tone. Whichever tone is doubled in either inversion care must be exercised to avoid consecutive Octaves. The repeated Octave C in QQ is good because there is no movement in either part.

If the base and tenor lie close together, and the alto and soprano are also close together, the effect of an Octavo-distance between the tenor and alto is poor, as seen in H, second pulse. If the three lower parts lie close together the distance of an Octave between the alto and soprano will be good, as seen in Q, R, S, T, X, and CC. If all the parts are relatively placed as to distance, an Octave between any two parts will be good, as seen in JJ, KK, LL, and MM.

In BB, the leading-tone skips down to the Fifth of the tonic chord, and while such a skip is commonly met with, the effect is not as good as in AA. If the Fifth of the tonic chord is desired for reasons of fullness then DD or EE is better than AA.

In JJ to MM, the first inversion of the tonic chord followed by the first inversion of the dominant chord is illustrated.

From long association, the second inversion of the tonic chord on an accented pulse seems to demand a cadence, half or authentic, hence it is usually advisable to avoid this unless the cadence effect is desired.

These forty-six illustrations are all possibilities from the accompanying exercises, and disclose the numerous opportunities for varied and melodious voice-progressions in the several parts.

The musical notation shows four exercises, A, B, C, and D, each consisting of two measures. The notation is in 4/4 time, with a treble and bass staff. The chords are labeled with Roman numerals and letters below them.

Exercise A: Treble staff has chords I, V, I, I, I, V, I, I. Bass staff has chords a, a, a, a, a, a, a, a. Labels I, V, I, I, I, V, I, I are below the treble staff. Labels a, a, a, a, a, a, a, a are below the bass staff.

Exercise B: Treble staff has chords I, V, I, I, I, V, I, I. Bass staff has chords a, a, a, a, a, a, a, a. Labels I, V, I, I, I, V, I, I are below the treble staff. Labels a, a, a, a, a, a, a, a are below the bass staff.

Exercise C: Treble staff has chords IV, IV, I, V, IV, IV, I, V. Bass staff has chords a, a, b, a, b, a, b, a. Labels IV, IV, I, V, IV, IV, I, V are below the treble staff. Labels a, a, b, a, b, a, b, a are below the bass staff.

Exercise D: Treble staff has chords IV, IV, I, V, IV, IV, I, V. Bass staff has chords a, a, b, a, b, a, b, a. Labels IV, IV, I, V, IV, IV, I, V are below the treble staff. Labels a, a, b, a, b, a, b, a are below the bass staff.

INVERTED CHORDS

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E F G H

I V I IV I V I IV I V I IV I V I IV

a b a b a b a b

I J K L

I V I IV I V I IV I V IV I I V IV I

a b a b b b b b

M N O P

I V IV I I V IV I I V I I I V I I

b b b a a a a

Q R S T

I V I I I V I I I V I I IV I V I I

a a a a a a a

U V W

IVorIV IV I V I V I I V I I V I

a b a a

X Y AA BB CC DD

I V I I V I I V I I V I I V V I

a b b b b b

EE FF GG HH II

I V I I V I I V I I V I I V I

b b b b b

JJ KK LL MM NN

I V I V I V I V I V I V I V IV I V

b a a b a a b a a a b

OO PP QQ RR SS TT

IV I V IV I V IV I V I I V I V I IV I
a b a b a b b b b b

Numerous versions are possible for each exercise and several should be discovered and compared to determine which gives the best result.

106. C, E^b. $\frac{4}{4}$ I . \widehat{V} I IV | I V I - | IV . \widehat{I} IV I | IV I V - |
b a b a a b b a b

I . \widehat{V} I IV | I IV I - | IV . \widehat{I} IV IV | I V I - ||
a a b a a b

107. D^b, F. $\frac{3}{4}$ I IV . \widehat{I} | I V - | I V I | I - V | I V I | V I IV |
b a b a b a b a a

I - V | I - - || 108. A^b, B. $\frac{4}{4}$ I V I I | IV IV I V | I V I IV |
b a a a b a b

I V IV I || 109. G^b, D. $\frac{2}{4}$ I . \widehat{V} | I IV | I IV | I - | V I | V I |
b b a a b a a

I - | V - | I . \widehat{V} | I V | I IV | I V | I . \widehat{IV} | I IV | I V | I - ||
b a b a a b a b a b

110. E, G. $\frac{4}{4}$ I V I . \widehat{V} | I IV I V | I IV I . \widehat{I} | V I V - |
b a a a b a a b a b

I V I . \widehat{IV} | I I I V | I V I . \widehat{I} | I V I - ||
a a b a b a b

SECTION 2

PRINCIPAL CHORDS IN MINOR

The illustrations of possible voice progressions for the principal chords in major in Section 1 of this Part are entirely applicable to

the principal chords in minor provided the signature in the illustrations be changed to *c*. Several versions for each exercise should be discovered, and these compared.

111. *c, e^b*. $\frac{6}{8}$ I - V I - I | IV IV I V - - | I - V I - IV |
_{a a a b a b}

I V IV I - - || 112. *a^b, f*. $\frac{4}{4}$ I - IV I | I - V - | I - V I | I - V - |
_{b b b a b a b}

I - V I | V I IV - | I - V - | I - - - || 113. *c[#], g*. $\frac{3}{4}$ I - V |
_{a b a a b}

I - IV | I - IV | I - - | V I - | V I - | I - - | V - - | I - V | I - V |
_{a b a a b a b a b a}

I IV - | I - V | I - IV | I - IV | I V - | I - - ||

114. *b^b, f[#]*. $\frac{4}{4}$ I . V I . IV | I V I - | IV . I IV . I | IV I V - |
_{b a b a b a b a b}

I . V I . IV | I IV I - | IV . I IV . IV | I V I - ||

115. *g[#], b*. $\frac{3}{4}$ I - V | I - V | I IV I | V - - | I - IV | I - I | V - I |
_{b a a a b a a b a b}

V - - | I - V | I - IV | I I I | V - - | I - V | I - I | I - V | I - - ||

The exercises in Sections 1 and 2 of this Part should be used for *prima vista* playing in all the principal major and minor keys.

SECTION 3

HARMONIZATION OF MELODIES WITH PRINCIPAL CHORDS IN MAJOR

No new principles are needed for the harmonization of these melodies, as the principles of doubling and voice progression illustrated in Section 1 are here applicable. As before stated, the melodic quality of the bass is now an important factor in the proper solution of these exercises. Nothing but the principal chords in the major keys should be used.

116. G, B \flat . $\frac{4}{4}$ 5 . $\widehat{6}$ 5 . $\widehat{3}$ | 1 2 3 - | 4 . $\widehat{5}$ 6 . $\widehat{4}$ | 3 - 2 - |
 3 . $\widehat{2}$ 1 . $\widehat{4}$ | 3 2 5 - | 6 . $\widehat{4}$ 3 . $\widehat{5}$ | 2 - 1 - || **117. E \flat , C.** $\frac{3}{4}$ 1 7 - |
 1 6 - | 4 5 6 | 3 - 2 | 1 2 3 | 4 5 6 | 5 1 7 | 1 - - || **118. E, D \flat .** $\frac{3}{4}$ 1 . $\widehat{2}$ |
 3 5 | 6 1 | 7 - | 1 7 1 6 | 5 6 5 3 | 4 5 | 2 - | 1 . $\widehat{2}$ | 3 5 | $\bar{3}$ 1 | 2 - |
 3 . $\widehat{2}$ | 1 6 | 5 7 | 1 - || **119. D, B.** $\frac{3}{4}$ 3 . $\widehat{2}$ 1 3 | 4 - 6 | 5 - 1 |
 7 - - | 1 . $\widehat{7}$ 1 6 | 5 - 3 | 1 - 3 | 2 - - | 3 . $\widehat{2}$ 1 3 | 4 - 6 | 5 - $\bar{3}$ |
 2 - - | 1 . $\widehat{7}$ 1 6 | 5 - 4 | 3 - 2 | 1 - - ||

SECTION 4

 HARMONIZATION OF MELODIES WITH PRINCIPAL CHORDS
 IN MINOR

These melodies offer opportunity for no new principles, those of the preceding Sections in this Part being all that are needed for guidance.

120. g, e. $\frac{3}{4}$ 5 6 . $\widehat{5}$ | $\widehat{3}$ 4 5 - | 3 4 . $\widehat{3}$ | 1 2 3 - | 5 1 . $\widehat{7}$ | 1 6 5 - |
 5 . $\widehat{4}$ 3 2 | 1 - - || **121. f, c \sharp .** $\frac{2}{4}$ 1 . $\widehat{7}$ 1 6 | 5 3 5 | 6 . $\widehat{5}$ 6 4 |
 3 1 2 | 1 . $\widehat{2}$ 3 5 | 4 . $\widehat{5}$ 6 1 | 3 . $\widehat{2}$ 3 1 | 7 2 $\underline{5}$ | 1 . $\widehat{7}$ 1 6 |
 5 3 5 | 6 . $\widehat{5}$ 6 4 | 3 1 2 | 1 . $\widehat{2}$ 3 5 | 4 . $\widehat{5}$ 6 1 | 7 . $\widehat{1}$ 2 3 | 2 $\underline{5}$ 1 ||
122. a, f \sharp . $\frac{3}{4}$ 5 1 3 2 | $\underline{5}$ 7 2 1 | 1 . $\widehat{2}$ 3 4 5 6 | 5 - - | 6 5 4 6 | 5 4 3 1 |
 1 . $\widehat{2}$ 3 2 1 5 | 6 - - | 5 1 3 2 | $\underline{5}$ 7 2 1 | 1 . $\widehat{2}$ 3 4 5 1 | 7 - - |
 1 . $\widehat{7}$ 1 6 5 | 5 . $\widehat{6}$ 5 3 1 | 1 . $\widehat{2}$ 3 1 5 6 | 1 - - ||

$$\begin{array}{l}
 \text{123. } d, b. \quad \frac{4}{4} \quad 3 \cdot \widehat{2} \quad 1 \quad 3 \mid \widehat{4} \quad \widehat{5} \quad \widehat{6} \quad 1 \quad 7 - \mid 1 \cdot \widehat{7} \quad 1 \quad 6 \mid \widehat{5} \quad \widehat{3} \quad \widehat{1} \quad 3 \quad 2 - \mid \\
 3 \cdot \widehat{2} \quad 1 \quad 3 \mid \widehat{4} \quad \widehat{6} \quad \widehat{5} \quad \widehat{3} \quad 2 - \mid 1 \cdot \widehat{7} \quad 1 \quad 6 \mid \widehat{5} \quad \widehat{4} \quad \widehat{3} \quad 2 \quad 1 - \parallel
 \end{array}$$

SECTION 5

SUBORDINATE CHORDS IN MAJOR, INCLUDING FOREIGN PROGRESSIONS

The VII is a diminished chord and usually gives a poor, weak result in fundamental form, though it may be used to carry out a harmonic sequence. The first inversion gives a better effect than the fundamental form, while the second inversion is usually very poor. The Third of the VII is the better tone for doubling, as in B, C, E, F, G, and H, though the Root might be doubled as in A and D. Whichever tone is doubled, care is necessary to avoid consecutive Octaves.

In E, consecutive Fifths occur between the tenor and alto, and are entirely correct, the first being a perfect Fifth while the second is a diminished Fifth. In F, these Fifths are reversed, the diminished Fifth preceding the perfect Fifth, and the effect is still good, in spite of the fact that theorists have always forbidden such a progression. If such consecutive Fifths were to occur between the alto and soprano, or between the bass and soprano, the effect would be poor, and such progressions should be avoided.

In F, VI has the Third doubled, while in I, VI and V both have the Third doubled. In J, I occurs with the Third doubled, followed by II with the Root doubled. In K, the progression between I and II causes consecutive perfect Fifths between the inner parts, ^a and ^b though such a progression is positively forbidden by theorists, yet the effect is good; if these Fifths must be avoided the tenor may skip as in L, doubling the Third of II. In K, M, and N, I ^a occurs with doubled Third, in each case the Octave progressing into the next chord by contrary motion. In P consecutive perfect

Fifths occur between the inner parts corresponding to κ , only in reverse order; if they must be avoided \circ offers another solution. In q consecutive Fifths occur between II and I , while in r consecutive Fifths occur between the VII and I ; if the Fifths in each case must be avoided the solution offered by the first measure of r followed by the second measure of q will suffice.

In general (with the exception of VII) the Root, the Third, or the Fifth in any chord may be doubled, the best effect in each case being determined solely by the chosen voice-progressions for each part. Consecutive Fifths between the inner parts, or between the tenor and soprano, or between the bass and alto, are allowable when the consecutive chords are a foreign progression, with one or both of these chords in inverted form, as in E , F , K , P , Q , and R ; (in each case the progressions are foreign.) The best form for the VII is first inversion with the Third doubled, though fundamental form is possible, and the Root in either case might be doubled.

The musical notation shows two systems of chords, each with a treble and bass staff. The chords are labeled A through J. Below the notation, Roman numerals and letters 'a' and 'b' are provided for each chord, indicating specific voice parts or doublings.

System 1 (A-E):

- A: VII III IV VII III IV VII III I VII IV I
- B: VII III IV VII III IV VII III I VII IV I
- C: VII III IV VII III IV VII III I VII IV I
- D: VII III IV VII III IV VII III I VII IV I
- E: VII III IV VII III IV VII III I VII IV I

System 2 (F-J):

- F: VI VII I I VII I I VII I VI V IV I V I II
- G: VI VII I I VII I I VII I VI V IV I V I II
- H: VI VII I I VII I I VII I VI V IV I V I II
- I: VI VII I I VII I I VII I VI V IV I V I II
- J: VI VII I I VII I I VII I VI V IV I V I II

Progressions that would not be at all tolerable in two-part writing might occur in three- or four-part writing, the poor effect being covered by the additional one or two parts; hence it is a false principle to allow nothing between any two parts in four-part writing except what would be allowed in two-part work.

K L M N O

I II I V I II I V I IV I II VI II I V
a a b a a b a a a a b

P Q R

VI II I V II VI II I VII I II VI II I VII I
a a b a b a a a b a a a

124. E, D \flat . $\frac{4}{4}$ I - I V | VI - VI III | IV - II II I - V - |
b b a b

V - II VI | III IV I V | VI IV I V | I - - - ||
b a b

125. C, E \flat . $\frac{4}{4}$ I \widehat{V} I II II \widehat{IV} | V I \widehat{V} I IV I | II \widehat{V} I \widehat{V} I IV I II |
b a b a a b a a b b a

I V I - || 126. B, D. $\frac{3}{4}$ I | I V I | IV I II | V I V | I - I IV | V V V |
b b a a b a b a b

II VI II | I V V | I - - || 127. F, A \flat . $\frac{2}{4}$ I IV \widehat{VI} | II \widehat{VI} I |
b a a b b

IV I III | VI I III | IV \widehat{VI} II \widehat{VI} | V \widehat{V} I I | V I II V | I - ||
b a b a b a b a

128. A, F \sharp . $\frac{6}{8}$ I | I V I IV I II | I V II I I V V | IV I IV I IV II VI |
a b a b a b a b b a a b

II I II I V I - - || 129. G, B \flat . $\frac{4}{4}$ I . \widehat{V} I IV | VII III VI - |
a a b a a

$$\begin{array}{l}
 \text{I. } \widehat{\text{IV}} \text{ VII III} \mid \widehat{\text{VI}} \text{ V IV I} \mid \text{V. } \widehat{\text{I}} \text{ II V} \mid \text{I VII IV I} \mid \text{V. } \widehat{\text{VI}} \text{ VII I} \mid \\
 \text{a} \quad \text{a} \quad \text{a} \quad \text{a} \quad \text{b} \quad \text{a} \quad \text{a} \quad \text{a} \quad \text{a} \quad \text{b} \quad \text{a} \quad \text{a} \quad \text{a} \quad \text{a} \\
 \text{II V I} - \parallel \quad \text{130. } \text{G}^\flat, \text{D}^\flat. \quad \frac{3}{4} \text{ I V I} \mid \text{I V I} \mid \text{IV I IV} \mid \text{IV I II} \mid \\
 \text{a} \quad \text{b} \quad \text{a} \quad \text{b} \quad \text{a} \quad \text{a} \quad \text{b} \quad \text{b} \\
 \text{II VI II IV} \mid \text{V I V I} \mid \text{IV I I V V} \mid \text{I IV I} \parallel \quad \text{131. } \text{C}^\flat, \text{E. } \frac{3}{4} \text{ I - V} \mid \\
 \text{b} \quad \text{a} \quad \text{a} \quad \text{b} \quad \text{b} \quad \text{b} \quad \text{b} \quad \text{a} \\
 \text{I III} - \mid \text{VI - II} \mid \text{I V -} \mid \text{II VI II} \mid \text{I VII I} \mid \text{II I V} \mid \text{I - -} \parallel \\
 \text{a} \quad \text{a} \quad \text{b} \quad \text{a} \quad \text{b} \quad \text{a} \quad \text{a} \quad \text{a} \quad \text{b}
 \end{array}$$

These exercises will be found of great benefit for *prima vista* playing. Several versions for each should be discovered and compared, to determine which will give the best results in sound. Each voice-part should be more or less melodious and singable.

SECTION 6

SUBORDINATE CHORDS IN MINOR INCLUDING FOREIGN PROGRESSIONS

In harmonic minor we find two diminished chords, II and VII, and an augmented chord on III. Theorists generally have been rather diffident in the treatment of these chords in relation to part-writing, yet, while all are discords, for this very reason a freer use of them will add richness and variety to harmonic motives.

In II and VII the better tone for doubling in most cases is the Third, as in A to J, and in L to Q, while in K the Fifth of VII is doubled.

In J, K, L, N, O, and P consecutive Fifths are disclosed between the tenor and the alto, except in K and P; these are not disagreeable in any way, though the solution in M and N is better than that in L, while O is poor on account of the distance between the alto and soprano in I. In Q the leading-tone in the soprano skips down to ^a5, with good effect.

The III in harmonic minor is a chord which seems to have been shunned by many composers, while theorists have rather ignored

it, yet it can be very effectively combined with other chords. The Root or Third may be doubled at will, but as the Fifth is the leading-tone and has such a strong tendency towards the tonic it is an awkward tone for doubling. In R to W, III is combined with VI in several ways. In X to DD, III is combined with I. In EE to PP, III is combined with IV, and in QQ to UU, III is followed by V.

In MM and PP consecutive Fifths are seen, and their effect is good; one of these Fifths is augmented, the other is perfect. In K, L, N, O, and P one of these consecutive Fifths is perfect, the other is diminished, while in J both are perfect. Every measure from A to UU may be played **backwards** with excellent effect, except those already noted as defective. Each of these measures, forward or backward, is a possibility from some one of the accompanying exercises and shows the wide range of choice open to the student in the solutions. Several versions for each exercise should be discovered and compared to determine which will result in the best effect.

The musical notation consists of two systems, each with a treble and bass staff. The exercises are labeled A through J above the staves. Below each staff is a line of figured bass notation indicating the chords.

System 1 (Exercises A-E):

- A:** Treble: F4, A4, C#4; Bass: F2, A2, C#2. Figured bass: I a, II a, V.
- B:** Treble: F4, A4, C#4; Bass: F2, A2, C#2. Figured bass: I a, II a, V.
- C:** Treble: F4, A4, C#4; Bass: F2, A2, C#2. Figured bass: I a, II a, V.
- D:** Treble: F4, A4, C#4; Bass: F2, A2, C#2. Figured bass: I a, II a, V.
- E:** Treble: F4, A4, C#4; Bass: F2, A2, C#2. Figured bass: I a, II a, V.

System 2 (Exercises F-J):

- F:** Treble: F4, A4, C#4; Bass: F2, A2, C#2. Figured bass: II b, IV b, V a.
- G:** Treble: F4, A4, C#4; Bass: F2, A2, C#2. Figured bass: II b, IV b, V a.
- H:** Treble: F4, A4, C#4; Bass: F2, A2, C#2. Figured bass: II b, IV b, V a.
- I:** Treble: F4, A4, C#4; Bass: F2, A2, C#2. Figured bass: II b, IV b, V a.
- J:** Treble: F4, A4, C#4; Bass: F2, A2, C#2. Figured bass: II b, IV b, V a.

INVERTED CHORDS

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K L M N O

I VII I I VII I I VII I I VII I I VII I
a a a a a a a a a a

P Q R S T U

I VII I I VII I IV III VI III VI III IV III VI
a a a a a a a b a

V W X Y AA BB CC

III VI III VI III I III I III I III I III I
b a a a a a a b b b b

DD EE FF GG HH II

III I III IV III IV III IV III IV III IV
b a a a a a a a b b

138. *c*, *b^b*. $\frac{6}{8}$ I I V V - - | I I IV IV - - | V VI IV VII - - |
 a b a *a* *a* *a*
I - V I - - || **139.** *e*, *f[#]*. $\frac{3}{4}$ I I IV | III - VI | II III I | III V - |
 b *a* *a* *a* *b a*
 $\widehat{\text{I I}} \widehat{\text{IV IV}} \widehat{\text{III IV}} | \text{I V} - | \widehat{\text{III . IV}} \widehat{\text{III III}} \widehat{\text{V}} | \widehat{\text{I IV}} \text{I} - ||$
 a *a b b* *b* *a* *a* *b*

SECTION 7

MODULATION

In the examples which follow, each exercise begins in an initial key, modulates into various other keys, all more or less closely related, and finally back to the initial key. In each case the modulation is effected by means of a chord common to both keys, the principle involved being the same as that employed in Part I, Sections 11 and 12, and in Part II, Section 9. In several instances enharmonic changes are necessary in the chord common to the two keys. Several versions for each exercise should be discovered and compared, to determine which gives the best result.

140. G, F. $\frac{4}{4}$ I - V V | VI V I - | II V I I | I V I - | IV - IV V |
I / b / a I b a I / b /
I V I - | IV IV I I | IV VII VI - | III - II V | I VII I III |
a b a / a a / a a a
II **VI**

141. D, E^b. $\frac{3}{4}$ I . IV I | IV - V | I - VI |
b / a V

min.
II - - | V I IV | I - V | VI - - | I V I | I - I | IV - IV | V - - |
a / b a b I / V V I / II
I

min.
I I IV | V - - | I V I | I V I | III - V | I - - ||
a a b a a
V **II**

142. *c, b \flat* . $\frac{3}{4}$ I - IV | IV - I | I - VI | V V - | VI V I | VII - I | II III V |
 $\begin{array}{cccccccc} & b/a & / & & /a & & /ba & a/a \\ I & I & III & I & I & II & & \end{array}$

VI - - | II - III | VII V - | I - V | ^{min.} I V - | IV - IV | V II - | V $\widehat{I\ I\ V}$ |
 $\begin{array}{cccccccc} & /a & & a/a & /a & /a & /ba & a/b \\ V & & II & II & II/V & I & I & b\ b \end{array}$

$\widehat{I\ .\ IV\ I} - \parallel$ 143. *a, f \sharp* . $\frac{4}{4}$ I IV VI - | V ^{min.} I VI - | ^{min.} I V I V |
 $\begin{array}{ccccccc} & & & I/a & / & a & /a\ b \\ I & V & & V & & VI & \end{array}$

I VII V - | III VI I - | ^{min.} V III VI - | ^{min.} I V I IV | I III $\widehat{V\ I} - \parallel$
 $\begin{array}{ccccccc} a/ & & & & & & \\ II & & V/V & & V & II & \end{array}$

144. *D \flat , B*. $\frac{3}{4}$ $\widehat{I\ VI\ V} - |$ ^{maj.} $\widehat{I\ VI\ V} - |$ ^{maj. min.} $\widehat{I\ I\ VII\ III} |$ $\widehat{VI\ V\ I} - |$
 $\begin{array}{ccccccc} & /a & & /a & & a/a & /a \\ I & I & I & V & I & I & I \end{array}$

$\widehat{I\ VI\ V} - |$ $\widehat{I\ VI\ V} - |$ ^{maj.} $\widehat{I\ II\ V\ V} |$ ^{maj.} $\widehat{I\ IV\ I} - \parallel$ 145. *g \sharp , f*. $\frac{4}{4}$ I - VI V |
 $\begin{array}{ccccccc} & /a & a/a & /a & a & b & /a \\ I & I & I & VI & & & I\ V \end{array}$

I - VI V | I IV III V | I IV V - | I - VI V | I - VI V |
 $\begin{array}{ccccccc} & /a & /a & a & a & a/a & /a \\ I & V & & II & V & I & V \end{array}$

$\begin{array}{ccccc} & min. & & & \\ I & I\ I\ IV & | & I\ V\ I - \parallel \\ III & V & a & b & \end{array}$

SECTION 8

BORROWED CHORDS. PASSING-KEYS. KEY-CENTRES

The principle of passing-keys, etc., as explained in Part II, Section 10, is applicable to inverted chords as well as to chords in fundamental form. Thus in example A, page 64, the progressions are entirely within C, while in B excursions into closely related keys are

effected without complete destruction of the original key-centre. The new key-entities which emerge in B are indicated by the marking under the example. In C, excursions farther afield are made, and here again the dual significance of more than half the chords is indicated by the marking under the example. Variants D, E, and F defy the emergence of key-entities except for the briefest possible moment, nevertheless the dual significance of the chords may be indicated by the markings, thus:

Marking for variant D.

I V I IV | E V I I - | I I I I | E V I I - | I I I IV | I V I - ||
 a a a / / a / / a / a a / a / a b
 V V V V V V V V V

Marking for variant E.

I V I I | IV IV IV - | c II V I IV | V I d V - | I IV IV IV | V V I - ||
 min. a / a / a a min. a / a a / a / a / b /
 V I I II I I I I

Marking for variant F.

I V I I | IV IV IV - | V I F V I | e V I g II - | V I I IV | I V I - ||
 min. a / a / a a a a maj. a a b
 V I I II V V

Different effects may be achieved by combining certain measures from one variant with other measures from different variants, thus:

First and second measures of B, third and fourth measures of C, fifth and sixth measures of A.

First and second measures of C, third and fourth measures of D, fifth and sixth measures of F.

First and second measures of D, third and fourth measures of E, fifth and sixth measures of C.

First and second measures of E, third and fourth measures of D, fifth and sixth measures of E.

First and second measures of D, third and fourth measures of F, fifth and sixth measures of E.

And so on *ad infinitum*.

A

I V I IV VII III VI II V I IV VII III VI
a a a a a a a a a a a a

B

II V I IV I V I I V I IV V I / VI
a a a b a a a a a a C
III

C

II V I IV V I IV I I I IV I V I min.
a a E a A V D V G V C V a a V / a I
II

V I I II V maj. IV IV VII V maj. min. IV IV
a VI a V a I a II V V a I I
V VI V I I

D

E

F

A careful analysis of example A and the variants B, C, D, E, and F will show that every possible major chord is actually or enharmonically present in these few measures, and that every possible minor chord except those on B, C#, and F# are also present, while these could easily be brought in by altering the major chords on those notes, (or their enharmonic equivalents), into minor chords.

Several of the exercises in Part III will admit of this kind of key-expansion, and the student should now revise his versions, seeking to enlarge the possibilities of this kind contained therein.

SECTION 9

HARMONIZATION OF MELODIES

The melodies in Section 3 and Section 4 of this Part should now be used for harmonizations with inverted chords. No principles other than those explained and illustrated throughout this Part will be needed. Several versions for each melody are possible, and these should be discovered and compared to determine which will give the best result. (Sections 7 and 8 of Part II should also be harmonized with inverted chords.)

SECTION 10

HARMONIC AND MELODIC EMBELLISHMENT

Paragraphs 520 to 549 inclusive of Harmony and Ear-Training (pages 149-159) should now be carefully studied, and then various exercises in Parts II and III embellished by simple suspensions, anticipations and passing-tones as there explained. A very effective result may be accomplished by the use of these embellishments treated contrapuntally as explained and illustrated in Paragraphs 524-526 of Harmony and Ear-Training.

No "rules" are needed, but the student must be guided by good taste, constant experiment, and self-criticism as well as by the experience and suggestion of the teacher.

PART IV
DOMINANT 7TH-CHORDS
SECTION 1

**THE DOMINANT 7TH-CHORD IN FUNDAMENTAL FORM IN
MAJOR, WITH RESOLUTION TO I, VI, IV**

Before attempting any of the exercises in this Part the student should become quite familiar with Chapter IX in Harmony and Ear-Training, and should have worked out all the three-part Exs. 295 to 356, and the four-part Exs. 357 to 375.

In four-part writing the Third or the Fifth of the V^7 may be omitted; in either case the Root of V^7 may be doubled as in segments H, I, L, N, O, CC, LL, MM, and NN. In any case, moving consecutive Octaves should be avoided between the doubled tones. When V^7 resolves directly into I the Fifth of the tonic chord may be omitted and the Root trebled as in segments A and D, or the Root and Third both doubled as in F and G, or the leading-tone (the Third of V^7) may be carried down as in E, contrary to its tendency. When V^7 is repeated the constituent notes (other than the bass) may change freely as in segments B, C, D, H, and I, but the chord should ultimately resolve in a manner somewhat conforming to the ordinary methods of procedure. In segments J and K V^7 resolves into I, and then progresses back into V^7 ; in this case I may be considered a passing-chord. (See paragraph 549, in Harmony and Ear-Training on Passing-Chords.)

In L, W, X, Y, AA, BB, and CC, some unusual progressions of V^7 into I are shown, but while unusual they are good. In L the upward progression of the Seventh of V^7 is entirely compensated for by the Third of the tonic chord (the tone to which the Seventh of V^7

would naturally resolve), being heard in the bass. This is also the case in Y, AA, and CC, while the tenor or the alto supply this tone in W, X, and BB.

In M, N, O, and P the ordinary method of connecting V⁷ with VI is shown, the Third of VI usually being doubled, but this is not absolutely necessary, as shown in U and V, where the Root or the Fifth of VI is doubled. The consecutive Fifths in these segments are good. In Q, R, S, and T V⁷ is shown in connection with VI,^a and the unusual progressions of the Seventh in Q, of the Fifth in R, and the consecutive Fifths in S are good. In DD to II V⁷ is shown in connection with IV, and in LL to PP with IV itself. The consecutive Fifths in LL, MM, OO and PP are good. In QQ to AAA V⁷ is shown in connection with IV, forming a plagal cadence, and the downward^b progression of the leading-tone in QQ, UU, XX, YY, ZZ, and AAA is good. The leap of the Seventh of V⁷ in WW is also good, as well as the leap of the Fifth of V⁷ in VV and WW. While all these possibilities are good and usable, yet some are better than others; which shall be used can be determined only by the context, and by the effect desired. The voice-leading of each part is entirely at the disposal of the composer, or student, and the range of choice is wide.

A B C D E F G

V⁷ I V⁷ V⁷ V⁷ V⁷ V⁷ I V⁷ I V⁷ I V⁷ I

H I J K L

V⁷ V⁷ V⁷ I V⁷ V⁷ I V⁷ V⁷ I

b b a

OO PP QQ UU VV

V⁷ IV V⁷ V⁷ IV V⁷ V⁷ IV I V⁷ IV I V⁷ IV I

WW XX YY ZZ AAA

V⁷ IV I V⁷ IV I V⁷ IV I V⁷ IV I V⁷ IV I

All the above segments are possibilities from some one of the following exercises, and show the wide range of choice open to the student in the solutions. Several versions for each exercise should be discovered, and these compared to determine which gives the best result.

146. E, F#. $\frac{4}{4}$ $\overset{5}{I}$ IV I V⁷ | I IV I - | I V⁷ VI IV | I $\overset{7}{V^7}$ V⁷ I - ||

147. A^b, C. $\frac{6}{8}$ $\overset{8}{I}$ V I IV - I | V⁷ IV V⁷ I - - | I II I IV V⁷ VI |

II III V⁷ I - - || 148. E^b, G. $\frac{4}{4}$ $\overset{8}{I}$. V⁷ VI IV | I . IV I VI |

IV . $\overset{7}{V^7}$ I V | VI III V⁷ - | IV . $\overset{7}{V^7}$ I VI | III . $\overset{7}{V^7}$ VI I |

II . $\overset{7}{V^7}$ VI II II | V⁷ . IV I - || 149. D^b, A. $\frac{4}{8}$ $\overset{8}{I}$ | V⁷ V⁷ V⁷ V⁷ | I . I IV |

VI I IV II | I - - I | II II V⁷ V⁷ | I I IV II | I - V⁷ V⁷ | I - - - ||

150. B, D. $\frac{4}{4}$ $\overset{8}{I} - \underset{a}{V} - \mid \underset{a}{I} \overset{7}{V} VI IV \mid \underset{a}{I} \underset{a}{I} \underset{b}{I} \underset{a}{I} \mid III - \overset{7}{V} - \mid$
 $IV - \overset{7}{V} - \mid \underset{a}{I} \underset{a}{I} IV \underset{a}{II} \mid \underset{b}{I} III \underset{a}{II} \underset{a}{II} \mid \underset{b}{I} \overset{7}{V} \underset{a}{I} - \parallel$

151. C, E \flat . $\frac{6}{8}$ $I - \overset{7}{V} VI - IV \mid \underset{b}{I} - \underset{a}{V} \underset{a}{I} - - \mid I - \underset{a}{V} VI V - \mid$
 $I - II III - \overset{7}{V} \mid \underset{a}{VI} - \underset{a}{VI} \underset{a}{I} - II \mid III - \overset{7}{V} VI - IV \mid \underset{b}{I} - \underset{a}{II} III I - \mid$
 $\overset{7}{V} - IV \underset{b}{I} - - \parallel$

152. B \flat , G. $\frac{4}{2}$ $I . \overset{7}{V} I VI \mid \underset{a}{V} \overset{7}{V} \underset{a}{I} - \mid VI . \overset{7}{V} I II \mid$
 $\underset{b}{I} \overset{7}{V} \underset{b}{I} \overset{7}{V} \mid \underset{a}{I} . \overset{7}{IV} \underset{a}{I} II \mid \underset{a}{VI} \underset{a}{V} \overset{7}{V} VI \mid IV . \overset{7}{II} \underset{a}{I} \underset{a}{V} \mid \overset{7}{V} . \overset{7}{IV} \underset{b}{I} - \parallel$

153. A, D. $\frac{3}{4}$ $I \underset{b}{V} \underset{a}{I} \mid \overset{7}{V} IV \overset{7}{V} \mid \underset{a}{VI} \underset{a}{V} \underset{a}{I} \mid III - \overset{7}{V} \mid \underset{a}{I} \underset{a}{I} \underset{a}{II} \mid \overset{7}{V} IV \underset{a}{I} \mid$
 $II IV \overset{7}{V} \mid \underset{a}{IV} \underset{a}{IV} \underset{a}{\hat{I}} \parallel$

154. F, D \flat . $\frac{4}{4}$ $I \mid \underset{b}{I} \overset{7}{V} \underset{b}{I} \overset{7}{V} \mid I - - VI \mid$
 $II VI \underset{b}{II} \overset{7}{V} \mid I - - IV \mid \underset{a}{I} \overset{7}{V} \underset{b}{I} \overset{7}{V} \mid VI - II - \mid \overset{7}{V} \underset{b}{I} \overset{7}{V} \overset{7}{V} \mid I IV \underset{b}{I} - \parallel$

SECTION 2

THE DOMINANT 7TH-CHORD IN FUNDAMENTAL FORM IN MINOR, WITH RESOLUTION TO I, VI, IV

In segments A to Q below, V^7 in the minor mode is shown in connection with I. In A, B, C, and D the natural tendencies of the tones of V^7 are allowed to predominate with the result that in I the Fifth is left out. In E, F, and G the leading-tone (the Third of V^7) is carried down contrary to its tendency to supply the Fifth of I. In H the Root, Fifth and Third of V^7 resolve naturally, but the Seventh is carried up, contrary to tendency, to supply the Fifth of I. In I to P, V^7 with the Fifth omitted is shown in connection with I, and in N, the ascending Seventh is again seen. Each of these segments is good. In Q to V, excepting U, consecutive Fifths as well as the ascending Seventh of V^7 are again seen,

and while contrary to the usually accepted procedure, yet each of these segments is good.

The V^7 in connection with I is illustrated in segments R to x; the upward leap of the Root of V^7 in v, and of the Fifth in w is effective in each case. In segments y to ff V^7 is illustrated in connection with VI; in each case the Third of VI is the better tone for doubling, while the leaps of the soprano in cc and dd are good.

In segments gg to oo V^7 is shown in connection with IV, and the leaps of the soprano in hh, ii, kk, and nn are good. In segments pp to tt V^7 is shown in connection with I, and here again, as well as in Section I, segments j and k, I might be considered as a passing chord. In segments uu to aaa V^7 is shown in connection with III; the III in these cases may be considered as passing chords, or possibly as suspensions. (See Harmony and Ear-Training, Paragraphs 528-534.)

In each of the segments where the strong tendency tones are misled, so to speak, the tone to which they would have naturally resolved is heard in another voice, the freedom of movement being thus compensated for, as in E, F, G, Q, R, S, T, CC, and TT.

The musical notation consists of two systems, each with a treble and bass staff. The first system contains segments A through G, and the second system contains segments H through N. Each segment is represented by a measure in the treble staff and a measure in the bass staff. The chords are labeled below the bass staff: V⁷ and I. The key signature is one sharp (F#).

Segment A: Treble staff has a half note G4 and a half note A4; Bass staff has a half note F#3 and a half note G3. Chords: V⁷ (F#3, G3, A3, B3) and I (G3, A3, B3, C4).

Segment B: Treble staff has a half note A4 and a half note B4; Bass staff has a half note G3 and a half note A3. Chords: V⁷ (G3, A3, B3, C4) and I (A3, B3, C4, D4).

Segment C: Treble staff has a half note B4 and a half note C5; Bass staff has a half note A3 and a half note B3. Chords: V⁷ (A3, B3, C4, D4) and I (B3, C4, D4, E4).

Segment D: Treble staff has a half note C5 and a half note D5; Bass staff has a half note B3 and a half note C4. Chords: V⁷ (B3, C4, D4, E4) and I (C4, D4, E4, F#4).

Segment E: Treble staff has a half note D5 and a half note E5; Bass staff has a half note C4 and a half note D4. Chords: V⁷ (C4, D4, E4, F#4) and I (D4, E4, F#4, G4).

Segment F: Treble staff has a half note E5 and a half note F#5; Bass staff has a half note D4 and a half note E4. Chords: V⁷ (D4, E4, F#4, G4) and I (E4, F#4, G4, A4).

Segment G: Treble staff has a half note F#5 and a half note G5; Bass staff has a half note E4 and a half note F#4. Chords: V⁷ (E4, F#4, G4, A4) and I (F#4, G4, A4, B4).

Segment H: Treble staff has a half note G5 and a half note A5; Bass staff has a half note F#4 and a half note G4. Chords: V⁷ (F#4, G4, A4, B4) and I (G4, A4, B4, C5).

Segment I: Treble staff has a half note A5 and a half note B5; Bass staff has a half note G4 and a half note A4. Chords: V⁷ (G4, A4, B4, C5) and I (A4, B4, C5, D5).

Segment J: Treble staff has a half note B5 and a half note C6; Bass staff has a half note A4 and a half note B4. Chords: V⁷ (A4, B4, C5, D5) and I (B4, C5, D5, E5).

Segment K: Treble staff has a half note C6 and a half note D6; Bass staff has a half note B4 and a half note C5. Chords: V⁷ (B4, C5, D5, E5) and I (C5, D5, E5, F#5).

Segment L: Treble staff has a half note D6 and a half note E6; Bass staff has a half note C5 and a half note D5. Chords: V⁷ (C5, D5, E5, F#5) and I (D5, E5, F#5, G5).

Segment M: Treble staff has a half note E6 and a half note F#6; Bass staff has a half note D5 and a half note E5. Chords: V⁷ (D5, E5, F#5, G5) and I (E5, F#5, G5, A5).

Segment N: Treble staff has a half note F#6 and a half note G6; Bass staff has a half note E5 and a half note F#5. Chords: V⁷ (E5, F#5, G5, A5) and I (F#5, G5, A5, B5).

73

O P Q R S T U

V⁷ I V⁷ I V⁷ I V⁷ I V⁷ I V⁷ I V⁷ I V⁷ I

a a a a

V W X Y AA BB CC

V⁷ I V⁷ I V⁷ I V⁷ VI V⁷ VI V⁷ VI V⁷ VI

a a a

DD EE FF GG HH II JJ

V⁷ VI V⁷ VI V⁷ VI V⁷ IV V⁷ IV V⁷ IV V⁷ IV

a a a a

KK LL MM NN OO PP

V⁷ IV I V⁷ IV V⁷ IV V⁷ IV V⁷ IV V⁷ I V⁷

a b a a a a b

QQ RR SS TT

V⁷ I V⁷ V⁷ I V⁷ V⁷ I V I V⁷ I V⁷

b b b b b b b b

UU WW XX YY AAA

V⁷ III V⁷ V⁷ III V⁷ V⁷ III V⁷ III V I III V⁷

a a a a a a a a

Each of these segments is a possibility from some one of the following exercises and shows the wide range of choice open to the student in the working out. At least two versions for each exercise should be discovered and compared to determine which gives the better result.

155. *b, a.* $\frac{6}{8}$ I V I IV - II | III - - V⁷ - - | VI I IV I - I |
_{a a b a}
V⁷ - - - - - | IV V⁷ I IV I II | I I V⁷ I - - ||

156. *e, g.* $\frac{3}{4}$ I I I |
_{a b a b}
IV . IV IV | I I V⁷ I . IV I | I IV V⁷ | VI . IV I | V⁷ V⁷ V⁷ | I . IV I |
_{a a b b b a a b b}

157. *g#, f.* $\frac{4}{4}$ I - V I | IV - I - | V⁷ - IV V⁷ | I I I - | I - II I |
_{a a b a a}
IV V⁷ VI - | II - III V⁷ | I IV I - ||

158. *c#, bb.* $\frac{3}{4}$ I | IV I V⁷ |
_b

$$\text{VI IV I} \left| \begin{smallmatrix} \text{IV} \\ \text{b} \end{smallmatrix} \begin{smallmatrix} \text{III} \\ \text{a} \end{smallmatrix} \text{V}^7 \right| \text{I} \cdot \text{IV I} \left| \begin{smallmatrix} \text{I} \\ \text{b} \end{smallmatrix} \begin{smallmatrix} \text{II} \\ \text{a} \end{smallmatrix} \text{I} \right| \text{IV I IV} \left| \begin{smallmatrix} \text{III} \\ \text{a} \end{smallmatrix} \text{V}^7 \text{V}^7 \right| \text{I} \cdot \text{IV I} \left| \begin{smallmatrix} \text{I} \\ \text{b} \end{smallmatrix} \right| \parallel$$

159. *a, f \sharp .* $\frac{4}{4}$ $\text{I} \cdot \text{V}^7 \text{IV} \cdot \text{IV} \left| \text{V}^7 \text{I V} - \right| \text{I} \cdot \text{V I} \cdot \text{IV} \left| \begin{smallmatrix} \text{I} \\ \text{b} \end{smallmatrix} \begin{smallmatrix} \text{IV} \\ \text{a} \end{smallmatrix} \text{V}^7 - \right| \text{I} \cdot \text{V}^7 \text{VI} \cdot \text{IV} \left| \text{V}^7 \text{V}^7 \text{VI} - \right| \text{IV} \cdot \text{I IV II} \left| \begin{smallmatrix} \text{V}^7 \\ \text{a} \end{smallmatrix} \begin{smallmatrix} \text{III} \\ \text{b} \end{smallmatrix} \text{V}^7 \text{V}^7 \text{I} - \right| \parallel$

160. *e \flat , g.* $\frac{4}{2}$ $\text{I} \left| \text{V}^7 \text{V}^7 \text{V}^7 \text{V}^7 \right| \text{I I V}^7 \text{V}^7 \left| \begin{smallmatrix} \text{IV} \\ \text{a} \end{smallmatrix} \text{V}^7 \text{I IV} \left| \begin{smallmatrix} \text{V}^7 \\ \text{a} \end{smallmatrix} - \text{V}^7 \right| \text{VI IV IV II} \left| \text{V I VI II} \left| \begin{smallmatrix} \text{I} \\ \text{a} \end{smallmatrix} - \text{V}^7 - \right| \text{I IV I} - \right| \parallel$

161. *f, d.* $\frac{4}{4}$ $\text{I} \cdot \text{V I V} \left| \begin{smallmatrix} \text{I} \\ \text{a} \end{smallmatrix} \cdot \text{V I II} \left| \begin{smallmatrix} \text{I} \\ \text{a} \end{smallmatrix} \text{V}^7 \text{VI VI} \left| \begin{smallmatrix} \text{I} \\ \text{b} \end{smallmatrix} - - - \right| \right|$

$\text{I} \cdot \text{V I IV} \left| \begin{smallmatrix} \text{I} \\ \text{a} \end{smallmatrix} \cdot \text{V I IV} \left| \begin{smallmatrix} \text{I} \\ \text{b} \end{smallmatrix} \begin{smallmatrix} \text{III} \\ \text{a} \end{smallmatrix} \text{VI} - \right| \text{V}^7 \text{III V}^7 \text{I III V}^7 \left| \begin{smallmatrix} \text{I} \\ \text{a} \end{smallmatrix} - - - \right| \parallel$

162. *c, d.* $\frac{3}{4}$ $\text{I V}^7 - \left| \text{VI IV} - \left| \begin{smallmatrix} \text{I} \\ \text{b} \end{smallmatrix} \begin{smallmatrix} \text{IV} \\ \text{a} \end{smallmatrix} \begin{smallmatrix} \text{I} \\ \text{b} \end{smallmatrix} \begin{smallmatrix} \text{IV} \\ \text{a} \end{smallmatrix} \text{II} \left| \text{V} - - \right| \text{I V}^7 - \left| \begin{smallmatrix} \text{VI} \\ \text{a} \end{smallmatrix} \text{IV} - \left| \begin{smallmatrix} \text{I} \\ \text{b} \end{smallmatrix} \begin{smallmatrix} \text{IV} \\ \text{a} \end{smallmatrix} \begin{smallmatrix} \text{III} \\ \text{a} \end{smallmatrix} \text{V}^7 \right| \text{I} - - \right| \parallel$

SECTION 3

HARMONIZATION OF MELODIES

In the harmonization of these melodies the dominant 7th-chord in fundamental form only should be used. All the ordinary possibilities of harmonic progression contained in these melodies are illustrated in the segments and exercises of Sections 1 and 2 of this Part.

Open and close harmony may alternate at pleasure. Seek to make the other three voice-parts as melodious as possible. At least two versions for each melody should be discovered. Under no circumstances should the pupil go outside the limits of the previous Parts and Sections.

QQ RR SS TT

V⁷ I V⁷ V⁷ I V⁷ V⁷ I V I V⁷ I V⁷

b b b b

UU WW XX YY AAA

V⁷ III V⁷ V⁷ III V⁷ V⁷ III V⁷ V⁷ III V I III V⁷

a a a a

Each of these segments is a possibility from some one of the following exercises and shows the wide range of choice open to the student in the working out. At least two versions for each exercise should be discovered and compared to determine which gives the better result.

155. *b, a.* $\frac{6}{8}$ I V I IV - II | III - - V⁷ - - | VI I IV I - I |
_{a a b a}

V⁷ - - - - - | IV V⁷ I IV I II | I I V⁷ I - - ||

156. *e, g.* $\frac{3}{4}$ I I I |
_{a a b}

IV . IV IV | I I V⁷ | I . IV I | I IV V⁷ | VI . IV I | V⁷ V⁷ V⁷ | I . IV I |
_{a a b b b a a b b}

157. *g#, f.* $\frac{4}{4}$ I - V I | IV - I - | V⁷ - IV V⁷ | I I I - | I - II I |
_{a a b a}

IV V⁷ VI - | II - III V⁷ | I IV I - ||

158. *c#, b \flat .* $\frac{3}{4}$ I | IV I V⁷ |
_{a b}

$$\text{VI IV } \underset{b}{|} \underset{a}{\text{IV III V}^7} \underset{b}{|} \text{I} \cdot \underset{b}{\text{IV I}} \underset{a}{|} \text{I II I} \underset{b}{|} \underset{a}{\text{IV I IV}} \underset{a}{|} \text{III V}^7 \underset{b}{\text{V}^7} \underset{b}{|} \text{I} \cdot \underset{b}{\text{IV I}} \parallel$$

159. *a, f, ♯.* $\frac{4}{4}$ $\text{I} \cdot \underset{a}{\text{V}^7 \text{IV}} \cdot \underset{a}{\text{IV}} \underset{b}{|} \underset{b}{\text{V}^7 \text{I V}} \underset{a}{|} \text{I} \cdot \underset{a}{\text{V I}} \cdot \underset{a}{\text{IV}} \underset{b}{|}$
 $\underset{b}{\text{I IV}} \underset{a}{|} \underset{a}{\text{I III V}^7} \underset{b}{|} \text{I} \cdot \underset{a}{\text{V}^7 \text{VI}} \cdot \underset{a}{\text{IV}} \underset{b}{|} \underset{a}{\text{V}^7 \text{V}^7 \text{VI}} \underset{b}{|} \underset{a}{\text{IV}} \cdot \underset{b}{\text{I IV II}} \underset{a}{|}$
 $\underset{a}{\text{V}^7 \text{III V}^7 \text{V}^7 \text{I}} - \parallel$

160. *e^b, g.* $\frac{4}{2}$ $\text{I} \underset{a}{|} \underset{a}{\text{V}^7 \text{V}^7 \text{V}^7 \text{V}^7} \underset{a}{|} \text{I I V}^7 \underset{a}{\text{V}^7} \underset{a}{|}$
 $\underset{a}{\text{IV V}^7 \text{I IV}} \underset{a}{|} \underset{a}{\text{V}^7 - - \text{V}^7} \underset{a}{|} \underset{a}{\text{VI IV IV II}} \underset{a}{|} \underset{a}{\text{V I VI II}} \underset{b}{|} \underset{b}{\text{I - V}^7} \underset{b}{|} \underset{b}{\text{I IV I -}} \parallel$

161. *f, d.* $\frac{4}{4}$ $\text{I} \cdot \underset{a}{\text{V I V}} \underset{a}{|} \text{I} \cdot \underset{a}{\text{V I II}} \underset{a}{|} \underset{b}{\text{I V}^7 \text{VI VI}} \underset{b}{|} \text{I - - -}$
 $\underset{a}{\text{I} \cdot \underset{b}{\text{V I IV}}} \underset{b}{|} \underset{b}{\text{I IV}} \underset{a}{|} \underset{a}{\text{I III VI}} \underset{a}{|} \underset{a}{\text{V}^7 \text{III V}^7 \text{I III V}^7} \underset{a}{|} \text{I - - -} \parallel$

162. *c, d.* $\frac{3}{4}$ $\text{I V}^7 \underset{b}{|} \underset{b}{\text{VI IV -}} \underset{b}{|} \underset{b}{\text{I IV}} \underset{a}{|} \underset{a}{\text{I IV}} \underset{a}{|} \underset{a}{\text{II V - -}} \underset{a}{|} \underset{a}{\text{I V}^7} \underset{a}{|}$
 $\underset{b}{\text{VI IV -}} \underset{b}{|} \underset{b}{\text{I IV}} \underset{a}{|} \underset{a}{\text{I IV}} \underset{a}{|} \underset{a}{\text{III V}^7} \underset{a}{|} \text{I - -} \parallel$

SECTION 3

HARMONIZATION OF MELODIES

In the harmonization of these melodies the dominant 7th-chord in fundamental form only should be used. All the ordinary possibilities of harmonic progression contained in these melodies are illustrated in the segments and exercises of Sections 1 and 2 of this Part.

Open and close harmony may alternate at pleasure. Seek to make the other three voice-parts as melodious as possible. At least two versions for each melody should be discovered. Under no circumstances should the pupil go outside the limits of the previous Parts and Sections.

A B C D E F G

H I J K L M

N O P Q R S

T U V W X Y

The musical score is organized into four systems, each with two staves (treble and bass clef). The chords are written in a simplified manner, often using Roman numerals (V⁷, I, VI) and the letter 'a' to denote specific voicings or accidentals. The letters A through Y are placed above the corresponding chords. Some letters have alternative voicings indicated by 'or'.

System 1 (A-G):
 A: V⁷ a, I
 B: V⁷ a, I
 C: V⁷ a, I
 D: V⁷ a, I
 E: V⁷ a, I
 F: V⁷ a, I
 G: V⁷ a, I

System 2 (H-M):
 H: V⁷ a, I
 I: V⁷ a, I
 J: V⁷ a, I
 K: V⁷ a, I
 L: V⁷ a, I
 M: V⁷ a, I

System 3 (N-S):
 N: V⁷ a, I
 O: V⁷ a, I
 P: V⁷ a, I
 Q: V⁷ a, I
 R: V⁷ a, I
 S: V⁷ a, I

System 4 (T-Y):
 T: V⁷ a, I
 U: V⁷ a, I
 V: V⁷ a, I
 W: V⁷ a, I
 X: V⁷ a, I
 Y: V⁷ a, I

Z AA BB CC DD EE
 V⁷ VI V⁷ IV V⁷ IV V⁷ IV V⁷ IV V⁷ IV V⁷ IV
 a a a b a a b a a a a a

FF GG HH II LL MM
 V⁷ IV V⁷ IV V⁷ IV V⁷ IV V⁷ IV V⁷ I V⁷ VI
 a b a b a b a b a a a a

NN OO PP QQ UU RR SS
 V⁷ I V⁷ I V⁷ I V⁷ IV V⁷ IV V⁷ IV V⁷ IV V⁷ VI
 a a a b a a a b a a a a

Segments I A to I PP illustrate the resolution of V^7 into various forms of I , VI , and IV . I A to I T into I or I ; the consecutive Fifths in I D , I P , I R , I S , and I T , though usually forbidden by theorists, are nevertheless good, and are caused by the upward progression of the Seventh; the Third of I , into which this Seventh would have otherwise naturally resolved, is heard and compensated for in another part. In I F , I M , and I N the Third of V^7

leaps up to the Third of I; **I M** shows in addition to this the upward progression of the Seventh, while **I N** shows these same features plus the upward leap of the Root; each case is good. **I O** to **I T** shows resolution into I; in **I R** the Root of V^7 ^b skips up an octave into the Fifth of I; ^a an upward progression of the Seventh occurs, and consecutive Fifths, yet the effect is excellent; **I S** is the same as **I R** except that the soprano skips from Root to Root. The upward progression of the Seventh in **I P**, **I R**, **I S**, and **I T** is amply justified by its natural tone of resolution being heard in another part. In **I U** to **I DD** progression into VI is effected; unusual progressions are shown in **I W**, **I Y**, and **I AA**, but each is good. **I EE** to **I HH** illustrate progression into IV. In **I KK** to **I PP** V^7 ^b, with the Third omitted and the Root or Fifth doubled with various resolutions, is illustrated.

The musical notation shows two systems of harmonic progressions. Each system consists of a treble staff and a bass staff. Above the treble staff are labels for the chords: **I A**, **I B**, **I C**, **I D**, **I E**, **I F** in the first system, and **I G**, **I H**, **I J**, **I K**, **I L**, **I M**, **I N** in the second system. Below the bass staff are labels for the chords in Roman numerals with figured bass notation: V^7_b I, V^7_b I, V^7_b I, V^7_b I, V^7_b I, V^7_b I, V^7_b I in the first system, and V^7_b I, V^7_b I, V^7_b I, V^7_b I, V^7_b I, V^7_b I, V^7_b I in the second system. The notation includes various musical symbols such as notes, rests, and accidentals.

DOMINANT 7TH-CHORDS

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I O I P I Q I R I S I T

V⁷ I V⁷ I V⁷ I V⁷ I V⁷ I V⁷ I V⁷ I

b a b a b a b a b a b a

I U I V I W I X I Y I Z I AA

V⁷ VI V⁷ VI V⁷ VI V⁷ VI V⁷ VI V⁷ VI V⁷ VI V⁷ VI V⁷ VI

b a b a b a b a b a b a b a

I BB I CC I DD I EE I FF I GG

V⁷ VI V⁷ VI V⁷ VI V⁷ IV V⁷ IV V⁷ IV V⁷ VI

b b b b b b b b b b b b

I HH I KK I LL I MM I NN I OO I PP

V⁷ IV V⁷ I V⁷ I V⁷ VI V⁷ VI V⁷ VI V⁷ IV V⁷ IV

b b b b a b a b a b b b a

Segments 2 A to 2 L illustrate resolution of V into I, VI, and IV.

In 2 B and 2 D the Third of V⁷ again leaps, first down, and then up, and though contrary to its natural tendency yet these progressions are good; 2 E shows the upward progression of the Seventh. Segments 3 A to 3 D illustrate progression from and into V⁷; 3 A and 3 B show four consecutive Fifths, yet the effect in both cases is good, though contrary to the usually accepted ideas.

Segments 4 A to 4 E illustrate several consecutive forms of V⁷. In such cases the parts may be interchanged at will.

While each of the segments illustrating the resolutions of V⁷ into I, VI, and IV in this Section is good, yet it is equally true that some are better than others, and that the context, (what comes before and what comes after), may improve or lessen the effect of each.

2 A 2 B 2 C 2 D 2 E 2 F 2 G 2 H 2 I

V⁷ I V⁷ I V⁷ I V⁷ I V⁷ I V⁷ VI V⁷ VI V⁷ VI V⁷ IV
 c a c a c a c a c b c b c b c b c

2 J 2 K 2 L 3 A 3 B

V⁷ IV V⁷ IV V⁷ IV V⁷ VI V⁷ I V⁷ VI V⁷ I
 c c b a b b a a a b a

3C 3D 4A

V⁷ I V⁷ I V⁷ IV I V⁷ IV V⁷ I V⁷ V⁷

c a b c a b b a a b

4B 4C 4D 4E

V⁷ V⁷ V⁷ V⁷ V⁷ V⁷ V⁷ V⁷ V⁷ I V⁷ V⁷ V⁷ V⁷ I

a b c a b c a b a a b

While all the foregoing segments are actual possibilities from the following exercises, yet the possibilities are not exhausted. The student should work out several versions for each of the following exercises and compare these carefully to determine the best.

171. D, F. $\frac{4}{4}$ | I $\widehat{V^7}$ I V⁷ VI | V⁷ IV $\widehat{V^7}$ I $\widehat{V^7}$ I | IV $\widehat{V^7}$ I $\widehat{V^7}$ IV I |

II - V⁷ - | I - - - ||

172. A, F#. $\frac{3}{4}$ | I . IV V⁷ | I . V⁷ VI |

V⁷ . I IV V⁷ | I I V - | I . IV V⁷ | I III $\widehat{V^7}$ VI | II . I V⁷ V⁷ | I V⁷ I - ||

173. G^b, E. $\frac{2}{4}$ I . $\widehat{V^7}$ | I VI | V⁷ V⁷ V⁷ | I I V V⁷ | I . V⁷ | I V⁷ |

I . IV | V⁷ IV | VI V⁷ | IV II | I V⁷ | I - ||

174. G, E^b. $\frac{3}{4}$ I - V⁷ |

I - V⁷ | V - V⁷ | I - - | II - VI | V⁷ - V⁷ | IV - V⁷ | I - - | VI - V⁷ |

VI - V⁷ | I - V⁷ | I - - | V⁷ I V⁷ | VI V⁷ I | II II V⁷ | I - - ||

175. D^b, F[#]. $\frac{4}{4}$ I $\overset{7}{V}$ I $\overset{7}{IV}$ $\overset{7}{V}$ | VI $\overset{7}{V}$ $\overset{7}{IV}$ I $\overset{7}{V}$ I | $\overset{7}{V}$ I I $\overset{7}{V}$ $\overset{7}{V}$ VI I |
 $\overset{7}{IV}$ $\overset{7}{V}$ $\overset{7}{IV}$ I - | $\overset{7}{V}$ I $\overset{7}{V}$ VI III $\overset{7}{IV}$ II | I III $\overset{7}{V}$ I - ||

176. D, G. $\frac{6}{8}$ I . $\overset{7}{V}$ I V VI $\overset{7}{V}$ | I - $\overset{7}{V}$ I - - | II . I II III $\overset{7}{V}$ $\overset{7}{V}$ |
VI - $\overset{7}{IV}$ I - - | $\overset{7}{V}$. I V $\overset{7}{V}$ $\overset{7}{IV}$ I | IV . $\overset{7}{V}$ I $\overset{7}{IV}$ $\overset{7}{V}$ $\overset{7}{V}$ |
VI . $\overset{7}{IV}$ I $\overset{7}{IV}$ $\overset{7}{IV}$ I | $\overset{7}{V}$ - - - - | I . $\overset{7}{V}$ I V VI $\overset{7}{V}$ | I - $\overset{7}{V}$ I - - |
IV . I $\overset{7}{IV}$ $\overset{7}{V}$ VI $\overset{7}{V}$ | I - I II - - | I . $\overset{7}{V}$ VI III IV I |
V . I $\overset{7}{V}$ $\overset{7}{IV}$ $\overset{7}{V}$ $\overset{7}{V}$ | I $\overset{7}{V}$ VI III $\overset{7}{IV}$ I | V II $\overset{7}{V}$ I - - ||

177. F[#], A^b. $\frac{3}{4}$ I - $\overset{7}{IV}$ | I - $\overset{7}{V}$ | I I I | $\overset{7}{V}$ - - | VI - $\overset{7}{V}$ | I - $\overset{7}{V}$ |
I V III | $\overset{7}{V}$ - - | I - $\overset{7}{IV}$ | I - $\overset{7}{V}$ | I I I $\overset{7}{V}$ | IV IV - | I $\overset{7}{V}$ I | II $\overset{7}{V}$ VI |
 $\overset{7}{V}$ IV $\overset{7}{V}$ | IV I - ||

SECTION 5

INVERSION OF THE DOMINANT 7TH-CHORD IN MINOR

Segments A to K illustrate resolutions of $\overset{7}{V}$ into I; the consecutive Fifths in F, H, J, and K are caused by the upward progression of the Seventh, and though usually prohibited they are permissible; the natural tone of resolution to which this Seventh would have otherwise resolved is heard in another voice-part. Segments L to V show the resolution of $\overset{7}{V}$ into VI; the upward leap of the Seventh in O, P, and U, as well as the consecutive Fifths in R, T, U, and V is permissible and under some circumstances effective. Segments W to EE illustrate resolution of $\overset{7}{V}$ into IV; in X, Y, CC, and

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I, VI, ^a and IV.

[illegible]

W X Y AA BB

V⁷ IV V⁷ IV V⁷ IV V⁷ IV V⁷ IV

a b a b a b a b a b

CC DD EE FF GG HH

V⁷ IV V⁷ IV V⁷ IV V⁷ I V⁷ I V⁷ I

a b a b a b a a a a a

II JJ KK LL MM NN

V⁷ I V⁷ IV V⁷ VI V⁷ IV V⁷ VI V⁷ I

a a a b a a b a a a a

- Segments 1 to 10 illustrate various resolutions of V⁷ into I, while 11 to 18 show resolution into I. The consecutive Fifths in 4, 13, 15, 16, 17, and 18 are caused by the Seventh not following its natural tendency, nevertheless they are permissible; this same upward progression of the Seventh is also seen in 2, 7, 9, 10, 12, and 14, and in each case it is compensated for by its natural tone of resolution being heard in another voice-part; in 7, 9, and 10 the Third of V⁷ is made to leap upwards to a tone other than its natural

19 20 21 22 23 24 25 26

V⁷ VI V⁷ VI V⁷ VI V⁷ VI V⁷ VI V⁷ VI V⁷ VI V⁷ VI
 b a b b b b b b a b b b a b b

27 28 29 30 31 32 33

V⁷ VI V⁷ IV V⁷ IV V⁷ IV V⁷ IV V⁷ I V⁷ I
 b b b b b b b b b b a

34 35 36 37 38 39 40

V⁷ I V⁷ VI VI V⁷ VI V⁷ VI V⁷ IV V⁷ IV V⁷ IV
 b b a b b a b b b b b b

Segments 1 A to 1 G illustrate resolution of V⁷ into I or I_c; in 1 G the Seventh is forced up, contrary to its tendency which is intensified by occurring in the bass voice-part, though the progression may be useful in a cadence. Segments 1 H to 1 L show resolution into VI_b, or into VI, as in L where the Seventh is caused to leap up into the Root of VI. Segments 1 M to 1 P illustrate resolution into IV_b, while 1 Q to 1 T show V⁷_c with the Third omitted, and the Root or Fifth doubled.

IA IB IC ID IE IF IG

V⁷ I V⁷ I V⁷ I V⁷ I V⁷ I V⁷ I I V⁷ I
c a c a c a c a c a c a a c b

IH II IJ IK IL IM

V⁷ VI V⁷ VI V⁷ VI VI V⁷ VI VI V⁷ VI V⁷ IV
c b c b c b b c b b c c

IN IO IP IQ IR IS IT

V⁷ IV V⁷ IV V⁷ IV V⁷ I V⁷ IV V⁷ VI V⁷ VI
c c c a c c b c b

All the possibilities of resolution of V⁷ inverted may be used in the following exercises, and show the wide range of choice open to the student. Several versions for each exercise should be worked out, attempting at all times to give the principal melody individuality, and to cause all the voice-parts to be as independent and individual as possible, yet withal keeping a well balanced ensemble and effect. These versions should be carefully compared to determine which is the best.

178. *d, g.* $\frac{3}{4}$ I. $\widehat{\overset{7}{V}I} | \overset{7}{V} - VI | \overset{7}{V} \overset{7}{V} \overset{7}{IV} \widehat{\overset{7}{V}I} | \widehat{\overset{7}{V}I} - | IV. \widehat{\overset{7}{V}I} |$
 $\overset{7}{V} \overset{7}{V} \widehat{\overset{7}{VI}IV} | \overset{7}{I} VI \widehat{\overset{7}{III}V} | I - - ||$ 179. *b, f#.* $\frac{2}{4}$ I $\widehat{\overset{7}{V}I} | I - | I \widehat{\overset{7}{IV}V} |$
 $VI - | IV \overset{7}{V} | I \overset{7}{V} | \widehat{\overset{7}{I}I} IV \widehat{\overset{7}{V}I} | \widehat{\overset{7}{VI}IV} \overset{7}{V} | \widehat{\overset{7}{I}I} \overset{7}{V} \overset{7}{V} | IV I | \widehat{\overset{7}{I}IV} \overset{7}{V} \overset{7}{V} |$
 $VI I | I IV | VI \widehat{\overset{7}{III}} | \widehat{\overset{7}{IV}IV} \widehat{\overset{7}{III}V} | \widehat{\overset{7}{VI}IV} I ||$
180. *e, g#.* $\frac{4}{4}$ I. $\widehat{\overset{7}{V}IV} \overset{7}{V} | I IV I \overset{7}{V} | IV. \widehat{\overset{7}{V}V} \overset{7}{VI} | \widehat{\overset{7}{II}I} \overset{7}{V} \overset{7}{V} |$
 $I. \widehat{\overset{7}{V}IV} \overset{7}{V} | I \overset{7}{V} VI - | \overset{7}{V}. \widehat{\overset{7}{VI}IV} \widehat{\overset{7}{II}} | I \overset{7}{V} IV I ||$
181. *f, a.* $\frac{6}{8}$ I - $\overset{7}{V}I - - | \overset{7}{V}I \overset{7}{V} VI - - | VI VI \overset{7}{V}I I \overset{7}{V} |$
 $IV I \overset{7}{V} IV I - | I - \overset{7}{V}IV - - | IV - \overset{7}{V} \overset{7}{V} VI - | I IV VI \overset{7}{V} I VI |$
 $I \widehat{\overset{7}{III}V} I - - ||$ 182. *g#, e#.* $\frac{4}{4}$ I $\widehat{\overset{7}{V}IV} | I \overset{7}{V} VI - | IV I - IV |$
 $I \overset{7}{V}I - | \overset{7}{V}VI \widehat{\overset{7}{VII}V} | VI \overset{7}{V}I \overset{7}{V} | \overset{7}{V}I IV IV | \overset{7}{V} - \overset{7}{V} - | I \overset{7}{V} - IV |$
 $I \overset{7}{V}VI - | IV I - IV | I \overset{7}{V}I - | \overset{7}{V}I \widehat{\overset{7}{II}I} | \overset{7}{V}VI IV \widehat{\overset{7}{II}} | I - \overset{7}{V} - | I IV I - ||$
183. *b#, g.* $\frac{3}{4}$ I - $\overset{7}{V}VI - - | I - \overset{7}{V}IV - - | IV \overset{7}{V}IV | \overset{7}{V} \overset{7}{V}I |$
 $I \overset{7}{V}VI | \overset{7}{V} - - | I - \overset{7}{V}VI - - | \overset{7}{V} - I | IV - - | I \overset{7}{V}I | \overset{7}{V}VI IV |$
 $\overset{7}{V} - \overset{7}{V} | IV I - ||$

SECTION 6

HARMONIZATION OF MELODIES

In harmonizing these melodies the dominant 7th-chord in any form or inversion may be used, as well as the fundamental form. Very effective versions may be discovered by keeping within the

bounds of possibilities, as explained in Sections 4 and 5. Open or close harmony may alternate at pleasure. Care should be exercised to make the alto, tenor, and bass as melodious and as singable as possible. At least two versions for each melody should be discovered, and then compared to determine which gives the better effect. Under no circumstances use material other than that explained and illustrated in preceding Parts.

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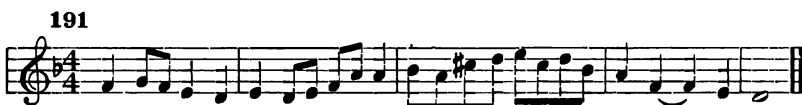


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SECTION 7

MODULATION

Each of the following exercises begins with an initial key, modulates into variously related keys, and ends in the original. The principles of common chords with various key-relations, as found in preceding Sections and Parts, is still followed, but is enlarged by the simpler possible resolutions of V^7 into the I, IV, or VI in either the major or the tonic harmonic minor keys, these chords of resolution being placed in another relation, and then the exercise continuing. The double marking in such cases indicates the dual relation of the chord; wherever the V^7 occurs in major and then is trans-

ferred to the tonic minor, or vice-versa, the V^7 figuring occurs twice, once as part of the old key, and then the lower figure indicates the change of mode. At least two very interesting versions for each exercise may be discovered.

192. C, F#. $\frac{3}{4}$ I - V^7 | VI - V^7 | I - V^7 | IV - I | V^7 II V^7 | I - IV |

$\text{I} - - | \text{V} - - | \text{I} - \text{V}^7 | \text{VI} - \text{V}^7 | \text{I} - \text{V}^7 | \text{IV} - \text{V}^7 | \text{VI} - \text{V}^7 | \text{IV} \text{ IV VI} |$

$\text{II} - \text{V}^7 | \text{I} - - ||$ **193. a, f.** $\frac{4}{4}$ I V^7 IV V^7 | VI V^7 I - | I V^7 VI V^7 |

$\text{VI} \text{ IV } V^7 - | \text{VI} \text{ VI } V^7 \text{ I} | \text{I} \text{ V } V^7 \text{ I} | V^7 \text{ VI} \text{ IV } V^7 | \text{VI} \text{ I} \text{ V} - |$

$\text{I} \text{ V}^7 \text{ VI} \text{ IV} | \text{I} \text{ V}^7 \text{ I} - ||$ **194. B, D \flat .** $\frac{6}{8}$ I - VI V - V^7 | I - VI V - V^7 |

$\text{I} - \text{IV} \text{ I} - \text{IV} | V^7 - V^7 \text{ I} - - | \text{I} - \text{VI} \text{ V} - V^7 | \text{I} - \text{VI} \text{ V} - V^7 |$

$\text{I} - V^7 \text{ VI} - \text{II} | \text{I} - V^7 \text{ I} - - ||$ **195. f#, b \flat .** $\frac{2}{4}$ I V^7 | IV V^7 | I V^7 |

$\text{IV} \text{ I} | \text{I} \text{ V}^7 | \text{IV} \text{ V}^7 | \text{I} \text{ V}^7 | \text{IV} \text{ V}^7 | \text{VI} \text{ I} | V^7 \text{ IV} | V^7 \text{ IV} | V^7 \text{ I} \text{ V} |$

$\text{I} \text{ V}^7 | \text{I} \text{ IV} \text{ I} ||$ **196. E, G.** $\frac{3}{4}$ I I . $\widehat{\text{I}}$ | V^7 - VI | I I . $\widehat{\text{I}}$ | V^7 - VI |

$\text{IV} \text{ V}^7 \text{ III} | V^7 - V^7 | \text{VI} - \text{V} | \text{I} - - | \text{I} \text{ I} . \widehat{\text{I}} | V^7 - \text{IV} | \text{I} \text{ I} . \widehat{\text{I}} | V^7 - \text{VI} |$

$\text{VI} \text{ V}^7 \text{ IV} | \text{II} - \text{I} | \text{III} \text{ III } V^7 | \text{I} - - ||$

II

197. *g, e.* $\frac{4}{4}$ $I \overset{7}{V} IV IV | \overset{7}{V} \overset{7}{V} VI - | I \overset{7}{V} IV IV | \overset{7}{V} \overset{7}{V} VI - | I \overset{7}{V} VI VI |$
 $I \quad I \quad I \quad I \quad I \quad I$
 $I \overset{7}{V} VI VI | I \overset{7}{V} VI VI | IV \overset{7}{V} VI - | I \overset{7}{V} IV IV | \overset{7}{V} \overset{7}{V} VI - | I \overset{7}{V} IV IV |$
 $I \quad I \quad I \quad \overset{7}{V} \overset{7}{V} I \quad I \quad I \quad I$
 $\overset{7}{V} \overset{7}{V} VI - | I \overset{7}{V} VI \overset{7}{V} | VI \overset{7}{V} VI - | IV IV III \overset{7}{V} | I \overset{7}{V} I - ||$
 $I \quad I \quad \overset{7}{V} \quad I$

198. *B, Ab.* $\frac{3}{4}$ $I IV \cdot \overset{7}{V} | I - V | II I \overset{7}{V} | VI - - | I IV \cdot \overset{7}{V} | I - V |$
 $V \quad IV \quad I \quad V$

$II I \overset{7}{V} | VI - - | I \overset{7}{V} \cdot \overset{7}{V} | VI - \overset{7}{V} | VI - \overset{7}{V} | VI - - | I \overset{7}{V} \cdot \overset{7}{V} |$
 $IV \quad I \quad III \quad I \quad I$

$IV - \overset{7}{V} | VI - \overset{7}{V} | VI - - | I V \cdot \overset{7}{V} | VI - - | I V \cdot \overset{7}{V} | VI - - |$
 $I \quad \overset{7}{V} \quad I \quad V \quad V \quad \overset{7}{V} \quad \overset{7}{V}$

min.

$I V \cdot \overset{7}{V} | VI - I | III - \overset{7}{V} | IV I - ||$ 199. *c, eb.* $\frac{6}{8}$ $I - \overset{7}{V} VI - \overset{7}{V} |$
 $I \quad I$

$IV - \overset{7}{V} IV - I | \overset{7}{V} IV \overset{7}{V} IV - IV | VI - \overset{7}{V} VI - - | VI - \overset{7}{V} VI - \overset{7}{V} |$
 $I \quad V \quad I \quad I \quad I \quad I$

$IV - \overset{7}{V} IV - I | \overset{7}{V} IV \overset{7}{V} IV - IV | VI - \overset{7}{V} VI - - | I - \overset{7}{V} IV - IV |$
 $I \quad V \quad I \quad I \quad I \quad \overset{7}{V} I$

$IV - \overset{7}{V} VI - IV | I - II III - I | III - \overset{7}{V} I - - ||$
 $I \quad II \quad IV$

SECTION 8 •

EXPANSION OF KEY-CENTRE, PASSING-CHORDS AND
PASSING-KEYS

Segment A is in strict accord with the key of C; it is a harmonic idea of plain diatonic progression with no side-stepping into related keys. The markings under the chords clearly indicate the simplicity of the material used.

A

I II I V VI VII VI III IV V I II VI V⁷ I
a b a b a a

B

I V⁷ IV V⁷ VI V⁷ IV I IV V⁷ I V⁷ II V⁷ I
IV a Ib IV a b III a IV a VI

Segment B illustrates essentially the same harmonic scheme with brief transitions into related keys, but the side-stepping is so brief, and the transitional keys are so closely related that the key-centre C, remains quite intact. The V⁷, second chord in measure one, resolves into IV of G, and this same C-major chord is also I in the key-centre. The V⁷ in measure two resolves into IV of e, and this resolution-chord is also VI in the key-centre. The V⁷ on D, last chord in measure three, resolves into II in G, and

this same A-minor chord is VI in the key-centre, C. The transitions into G and *e* are into very closely related keys, G being the dominant of the key-centre, and *e* the mediant minor, or the relative minor to the major dominant.

c

I V⁷ IV *a* V⁷ I V⁷ IV V⁷ VI V⁷ I V⁷ IV V⁷ I
 IV b b a IV b b I IV a IV a b I

Segment c illustrates the same transitions as segment b, but in addition excursions into the relative minor of the key-centre are illustrated; these occur in the first measure at the fourth pulse, where V⁷ on E is seen, with resolution into the tonic minor chord on A; but this same A-minor chord is also VI in the key-centre, as well as IV in the key of *e*, into which the next excursion is made. The V⁷ on E, the fourth pulse in the second measure, again suggests *a*, and resolves into the F-major chord, which is VI in the key of *a*, and IV in the key-centre as well.

In segment d excursions much wider afield are made; suggestions of the subdominant key, the relative minor, the supertonic minor, and of D \flat are thrown in. The V⁷ on C in the first measure with resolution into the F-major chord is clearly a transition into F, but this same chord of resolution, F-major chord, is also IV in the original key, and VI in the relative minor, *a*, into which the next excursion is made. The V⁷ on E, last chord in measure one, resolves normally into its tonic minor, and this same A-minor chord is VI in the original key, tonic in its relative minor, and III in the key of F into which the first transition was made. The V⁷ on A, the chord on the latter part of the second pulse of measure two, resolves normally into the D-minor chord, but this same

D-minor chord is also II in the original key, VI in the key of F, into which the first excursion was made, and the one that follows, and IV in *a*, into which the second excursion was effected.

D

I V⁷ I V⁷ I^d V⁷ I V⁷ IV C V⁷ VI D^b(V⁷) C I V⁷ I
V c VI a c VI a a b

The V⁷ on C, last pulse of measure two, resolves into the B \flat -major chord, IV of the key of F. The following chord, V⁷ or G has two tones in common with the B \flat -major chord, D and F. The V⁷ on A \flat , last chord in measure three, merely suggests the key of D \flat ; in reality this chord had better be written A \flat -C-E \flat -F \sharp , a three-five-augmented-6th chord on A \flat . A full exposition of augmented-6th chords will be found in *Harmony and Ear-Training*, Paragraphs 505-509, and 550-579.

E

While segment E keeps pretty closely to the melodic outline of the preceding segments, yet the suggestions of other keys are more varied. While these suggestions are in each case made through dominant seventh chords, yet as a matter of fact some of these dominant 7th-chords would appear better if written as augmented 6th-chords; thus the second chord in measure one would appear

more natural if written $A\flat-E\flat-F\sharp-C$, an augmented 6th-chord on $A\flat$, while the ones on the second pulse of measures two and three had better be written, respectively, $D\sharp-C-F-A$, and $D\sharp-A-C-F$, both being three-five-augmented-6th chords on F , $F-A-C-D\sharp$. The V^7 on $C\sharp$, last chord in measure one, causes a brief transition into the key of $f\sharp$, while the V^7 on B , last chord in measure three, suggests the key of e , and resolves into VI in that key; this same resolution-chord, C -major, is also tonic in the original key.

For a full explanation of the dual, triple, quadruple, and quintuple relation of chords, see *Harmony and Ear-Training*, Paragraphs 198-205, Chapter X, Chapter XI, Chapter XII, and Chapter XIII. For a full exposition of key-relation, see *Harmony and Ear-Training*, Chapter III, and Appendix I, Section A.

The most prevalent theory regarding such progressions and transitions is the explanation usually given under the title of "altered chords." According to this theory, no account of modulation is made, but, if a composition happened to begin in a key with a certain signature, all such accidentals as seen in segments B to E were accounted for as altered chords within such key. Thus the dominant seventh chord on D , as seen in B and elsewhere, was accounted for as "an altered secondary seventh chord on II of the scale." It was explained that this chord was in reality $D-F-A-C$ with the Third, F , raised a half-step.

The dominant seventh chord on B , last half of the second pulse in measure two of B , was explained as a secondary seventh chord on B in the key of C , $B-D-F-A$, with a raised Third and a raised Fifth. The dominant seventh chord on E , last pulse in measure one of c , was explained as an altered secondary seventh on E , III in the key of C , with a raised Third. The dominant seventh chord on C , second chord in the first measure of D , was explained as an altered I^7 in the key of C with a lowered Seventh; the dominant seventh chord on A , second chord in measure two of D , was explained as an altered VI^7 in the key of C , with a raised Third;

* For a full exposition of secondary 7th-chord see *Harmony and Ear-Training*, Chapter XII.

and the dominant seventh chord on $A\flat$, last chord in measure three of D, would have been explained as an altered secondary seventh chord on A, $A-C-E-G$, with a lowered Root, a lowered Fifth, and a lowered Seventh; if this same chord were to occur written thus, $A\flat-C-E\flat-F\sharp$ (as an augmented-6th chord), it would receive the explanation of an altered secondary seventh chord on F, $F-A-C-E$, with a raised Root, a lowered Third, and a lowered Seventh; or again, if the same chord had been written thus, $A\flat-C-D\sharp-F\sharp$, a form of spelling frequently met, it would have still another explanation as an altered secondary seventh chord on D, $D-F-A-C$, with a raised Root, a raised Third, and a lowered Fifth. Without taking into account segment E, segments B, C, and D will give all chromatic tones; and the natural conclusion from such theories would seem to be that a major scale can just as well be chromatic as diatonic; that there is no distinction between various secondary seventh chords and dominant seventh chords — and other equally untenable conclusions. Further, such a theory seems to lose sight of brief modulations, and would seem to consider music a matter of markings on paper, instead of effects in sound. Again, such a theory loses sight entirely of the very close and intimate relations of chords to various keys, and of one key to all others. Equally false conclusions would be drawn from the chords in segment E.

It seems reasonable that the explanations offered for the phenomena, such as passing-chords, passing-keys, and extension of key-centres, together with the phenomena of chord-connection without the establishment of a key-centre, as shown in preceding Sections, will fully cover any succession or progression in ancient, classical or modern music.

SECTION 9

MELODIC AND HARMONIC EMBELLISHMENT

Before taking up the problems presented in this Section, the student should master Chapter XIII in Harmony and Ear-Training, particularly from Paragraphs 520 to 556.

Segment A is an example of plain diatonic progression, strictly within the key, as the markings under the chords indicate. Nothing but the simplest material is used, though the dominant 7th-chord is illustrated with resolution into I, IV, and VI. The entire segment may be considered as a plain chorale in four voice-parts, easy to sing, and easy to comprehend.

Segments B, C, and D illustrate harmonic and melodic embellishment of this same material, the complexity growing gradually greater in B, then in C, and finally in D. Segments B and C are still entirely vocal, but D is rather more instrumental in conception, though a quartette of musicianly trained vocalists could probably render it effectively. It should be observed that the bass, the tenor, and the alto parts in segments A and B are identical, except for the additional tone on the second pulse of the last measure; the changes in B are effected by the soprano alone. Further, it should be observed that the bass, the tenor, and the soprano parts in segments A and C are identical, with the exception of the tenor in the last measure; in segment C the embellishments are effected by the alto part. But in segment D all the voice-parts are enriched with more or less freedom, with a corresponding effectiveness.

A

I V⁷ I V⁷ VI V⁷ IV V⁷ I V⁷ I IV V⁷ I VV⁷ IV I II V⁷ I

a a b a b a b a b

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B

Exercise B: A 4-measure piece in B major, 4/4 time. The melody in the treble clef starts on B4 and moves stepwise up to D5, then down to B4. The bass line in the bass clef starts on B2 and moves stepwise up to D3, then down to B2. The piano accompaniment consists of a steady eighth-note pattern in the right hand and a steady eighth-note pattern in the left hand.

C

Exercise C: An 8-measure piece in B major, 4/4 time. The melody in the treble clef starts on B4 and moves stepwise up to D5, then down to B4. The bass line in the bass clef starts on B2 and moves stepwise up to D3, then down to B2. The piano accompaniment consists of a steady eighth-note pattern in the right hand and a steady eighth-note pattern in the left hand.

Exercise D: An 8-measure piece in B major, 4/4 time. The melody in the treble clef starts on B4 and moves stepwise up to D5, then down to B4. The bass line in the bass clef starts on B2 and moves stepwise up to D3, then down to B2. The piano accompaniment consists of a steady eighth-note pattern in the right hand and a steady eighth-note pattern in the left hand.

D

The musical score is written in D major (two sharps: F# and C#) and 4/4 time. It consists of three systems, each containing four staves. The first system is marked with a 'D' above the first staff. The music features various melodic lines and harmonic textures, including sixteenth and thirty-second notes, and rests. The piece concludes with a double bar line at the end of the third system.

The soprano note on the first beat of the second measure in B is a prepared suspension, the Fifth of the dominant 7th-chord being suspended from above; in the fourth measure of B, on the third pulse, the soprano note B is a non-prepared suspension; this tone causes, for the moment, a secondary 7th-chord on VI, and theoretically this chord may be accounted for as a passing secondary 7th; the first note in the soprano of the penultimate measure is a prepared suspension, while the third pulse shows another non-prepared suspension; in the last measure the alto and tenor voices illustrate passing-tones, and these for the moment suggest a secondary 7th-chord on E, II of the key.

In segment c the embellishments are shown in the alto; the first note of the second measure illustrates a prepared suspension, as does the third pulse also; in the fourth measure the second note, B, is a passing-tone, while the third beat illustrates another prepared suspension; the second pulse of the fifth measure shows a passing-tone, E, but this passing-tone, for the moment, makes the chord the E minor chord, on II; the two eighth notes on the sixth measure illustrate a prepared suspension, followed by a passing-tone placed in between the suspending tone and the tone of resolution to which the suspension would naturally resolve; that is, the tied eighth note E suspends D, but in between the suspension-tone E, and the resolution-tone D, the tone B is placed as a passing-tone; in the seventh measure the natural harmonic tone B, is held back by the tied D from the preceding measure, and then the prolonged B causes a suspension from below of the C#, the Third of the dominant 7th-chord; in the last measure a plagal cadence is effected by two passing-tones, one in alto, the other in tenor.

Segment d will be found to illustrate single, double, and triple suspensions, both from above and below; some of these are prepared, and some non-prepared; it also illustrates anticipations, diatonic and chromatic passing-tones and passing chords, including dominant 7ths, diminished 7ths, secondary 7ths, and augmented

6th-chords, and passing-keys, or suggestions of other keys, while the cadence is quite fully elaborated.

The student should make a careful comparison of these four segments, studying the different methods of elaboration as here exemplified and developed, showing the possible enlargement, both melodically and harmonically, of simple material. Segment A is a working out of one of the exercises in this section, strictly according to the principles laid down, and it follows naturally that elaborations of other exercises are equally possible, so the student should seek to develop the various versions of his exercises in accordance with the principles of embellishment here explained.

PART V THE DIMINISHED 7TH-CHORD SECTION 1

THE DIMINISHED 7TH-CHORD IN KEY-RELATION

Before attempting to work out this Part the student will be obliged to familiarize himself with the explanation and treatment of the diminished 7th-chord found in Chapter XI of Harmony and Ear-Training.

When the diminished 7th-chord is used as a part of a key it is built on 7 of harmonic minor; the ordinary, more common resolution is into the tonic minor chord, as illustrated and explained in Paragraphs 411 and 412 in Harmony and Ear-Training, though the progression of the chord even within the key limits is not confined to the tonic, as shown by segments A to K following.

A B C D E
 VII^{o7} V⁷ VII^{o7} V⁷ VII^{o7} V⁷ VII^{o7} III VII^{o7} VII^{o7} III VII^{o7}
 a a a b b a b

F G H I J K
 VII^{o7} VI VII^{o7} VI VII^{o7} VII^{o7} IV VII^{o7} IV VII^{o7} V VII^{o7} III VII^{o7}
 c a a b c a a b b a c

In segments A, B, and C VII^{o7} progresses into V⁷. In segments D, E, and K it progresses into III. In F and G progression is made

into VI, while in \mathbf{H} and \mathbf{I} VII° is followed by IV. In \mathbf{J} VII° is followed by V, but the memory of the sound of the constituent tones of V^7 is so strong that the effect upon the mind is that of V^7 instead of merely V.

As the diminished 7th-chord is so thoroughly explained in the Chapter in Harmony and Ear-Training already referred to, and as all of the forms of the chord offer practically the same possibilities of resolution shown there and in the above segments, it does not seem necessary to discuss here the same questions.

To distinguish the diminished 7th-chord from the secondary 7th-chord found on the seventh degree of major keys, the diminished 7th-chord will be indicated by a small circle, immediately after the figure VII, thus VII° . Hence the diminished 7th-chord will be written VII° , while the secondary 7th-chord on 7 in major keys will be written VII^7 .

Several versions for each of the following exercises are possible, hence the student should discover and compare these to determine which is best.

200. *a, f#.* $\frac{3}{4}$ $\text{I VII}^{\circ} - \underset{c}{| \text{I VII}^{\circ} - | \text{VI IV} - | \underset{b}{\text{I V}}^7 - \underset{a}{| \text{I VII}^{\circ} \underset{a}{\text{V}}^7 |}$
 $\underset{a}{\text{I VII}^{\circ} \underset{a}{\text{V}}^7 | \underset{a}{\text{I IV} - | \underset{a}{\text{V}}^7 \text{I} - ||}$ 201. *f, g#.* $\frac{8}{8}$ $\text{I} - \underset{b}{\text{IV VII}^{\circ} - - |}$
 $\text{I} - \underset{c}{\text{VII}^{\circ}} \underset{b}{\text{I IV} - | \underset{a}{\text{I V}} \underset{b}{\text{IV VII}^{\circ}} \underset{a}{\text{III V}}^7 | \underset{c}{\text{VII}^{\circ}} \underset{a}{\text{IV V}}^7 \text{VI} - - |}$
 $\text{VI} - \underset{b}{\text{IV VII}^{\circ} - - | \underset{a}{\text{I I VI VII}^{\circ} - - | \underset{c}{\text{V}}^7 \text{VI IV III VII}^{\circ} \underset{b}{\text{VI} |}$
 $\underset{b}{\text{VII}^{\circ}} \underset{b}{\text{III V}}^7 \underset{b}{\text{IV I} - ||}$ 202. *d, e.* $\frac{4}{4}$ $\text{I} \cdot \underset{b}{\text{I VII}^{\circ} - | \underset{c}{\text{I} \cdot \text{I VII}^{\circ} - |}$
 $\underset{b}{\text{VI IV VII}^{\circ}} \underset{a}{\text{I} | \underset{a}{\text{II I VII}^{\circ}} \underset{c}{\text{V} | \underset{a}{\text{I} \cdot \text{I VII}^{\circ} - | \underset{a}{\text{I} \cdot \text{I VII}^{\circ} - |}$
 $\underset{b}{\text{VII}^{\circ}} \underset{a}{\text{IV VII}^{\circ}} \underset{b}{\text{VII}^{\circ}} | \underset{b}{\text{I V}}^7 \text{I} - ||$ 203. *eb, f#.* $\frac{3}{4}$ $\text{I VI VI} | \underset{a}{\text{VII}^{\circ}} \underset{a}{\text{VII}^{\circ}} \underset{a}{\text{V}}^7 |$
 $\underset{a}{\text{I II I} | \underset{c}{\text{VII}^{\circ}} \underset{c}{\text{VII}^{\circ}} \underset{c}{\text{V} | \underset{a}{\text{VI IV I} | \underset{b}{\text{VII}^{\circ}} \text{I VII}^{\circ} | \underset{a}{\text{III V}}^7 \underset{a}{\text{VII}^{\circ}} | \underset{b}{\text{IV I} - ||}$

204. $g\sharp, b. \frac{2}{4}$ I \cdot I $\overset{7}{\frown}$ | VII $\overset{7}{\frown}$ - | IV $\overset{7}{\frown}$. IV $\overset{7}{\frown}$ | V $\overset{7}{\frown}$ - | I V | I I | II VII $\overset{7}{\frown}$ |
 $\overset{c}{\underset{a}{\underset{b}{\frown}}}$ $\overset{a}{\underset{a}{\underset{a}{\frown}}}$ $\overset{a}{\underset{b}{\underset{a}{\frown}}}$ $\overset{a}{\underset{a}{\underset{c}{\frown}}}$
 I V | I \cdot I $\overset{7}{\frown}$ | VII $\overset{7}{\frown}$ - | I \cdot VI $\overset{7}{\frown}$ | VII $\overset{7}{\frown}$ VII $\overset{7}{\frown}$ | I VII $\overset{7}{\frown}$ | I VII $\overset{7}{\frown}$ | I VII $\overset{7}{\frown}$ |
 $\overset{b}{\underset{b}{\underset{a}{\frown}}}$ $\overset{b}{\underset{b}{\underset{a}{\frown}}}$ $\overset{a}{\underset{c}{\underset{b}{\frown}}}$ $\overset{b}{\underset{b}{\underset{a}{\frown}}}$
 VI $\overset{7}{\frown}$ IV I || 205. $g, b\flat. \frac{3}{4}$ I - V $\overset{7}{\frown}$ | VII $\overset{7}{\frown}$ V - | I - I | VII $\overset{7}{\frown}$ VII $\overset{7}{\frown}$ V - |
 $\overset{a}{\underset{a}{\underset{a}{\frown}}}$ $\overset{a}{\underset{a}{\underset{a}{\frown}}}$ $\overset{a}{\underset{a}{\underset{a}{\frown}}}$ $\overset{a}{\underset{a}{\underset{a}{\frown}}}$
 I IV I | VII $\overset{7}{\frown}$ III V $\overset{7}{\frown}$ | I IV VII $\overset{7}{\frown}$ | III V $\overset{7}{\frown}$ - | I I V $\overset{7}{\frown}$ | VII $\overset{7}{\frown}$ V $\overset{7}{\frown}$ - | I I I |
 $\overset{a}{\underset{b}{\underset{b}{\frown}}}$ $\overset{b}{\underset{b}{\underset{b}{\frown}}}$ $\overset{a}{\underset{b}{\underset{a}{\frown}}}$ $\overset{a}{\underset{a}{\underset{a}{\frown}}}$ $\overset{a}{\underset{a}{\underset{a}{\frown}}}$ $\overset{a}{\underset{a}{\underset{a}{\frown}}}$
 VII $\overset{7}{\frown}$ V $\overset{7}{\frown}$ - | I II III | I VII $\overset{7}{\frown}$ III | VII $\overset{7}{\frown}$ V $\overset{7}{\frown}$ VI $\overset{7}{\frown}$ I VII $\overset{7}{\frown}$ V $\overset{7}{\frown}$ | IV I - ||
 $\overset{a}{\underset{a}{\underset{a}{\frown}}}$ $\overset{a}{\underset{a}{\underset{a}{\frown}}}$ $\overset{a}{\underset{b}{\underset{a}{\frown}}}$ $\overset{a}{\underset{b}{\underset{a}{\frown}}}$ $\overset{c}{\underset{c}{\underset{b}{\frown}}}$ $\overset{b}{\underset{b}{\underset{a}{\frown}}}$

SECTION 2

MELODIES IN HARMONIC MINOR

In the harmonic minor mode the degrees of the scale that might be harmonized with VII $\overset{7}{\circ}$ of the key are 2, 4, 6, and 7, provided that these tones progress into other tones that will permit well-sounding resolutions or progressions of the VII $\overset{7}{\circ}$. In the following segments the ordinary possibilities of these degrees of the scale in this relation are illustrated.

A B C D E F G

H I J K L M N

O P Q R S T U

V W X Y Z AA BB

Segments A, B, and C illustrate progression from 2; segments H, I, and J show progression of 4; segments O, P, Q, R, and S show progression of 6: while this is the most natural resolution of 6 when used as part of VII^{7o} , yet it may skip up to 1, or down to 3 with good effect, as illustrated in segments Q and S; as 7 of the scale is such a pronounced leading-tone, when used as part of VII^{7o} its usual and best resolution is direct into 1. When either 2, 4, 6 or 7 skip to another tone that may be harmonized with VII^{7o} , perfect freedom may be allowed; these skips are shown in segments D, E, F, G, K, L, M, N, T, U, V, W, Y, Z, AA, and BB.

Several harmonizations are easily possible for each of the following exercises; these should be discovered and compared by the student.



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SECTION 3

THE DIMINISHED 7TH-CHORD IN THE MAJOR MODE

Before attempting to master the explanations, or to work out the exercises in this Section, the student should have a thorough grasp of the principles of key-relation as explained in Harmony and Ear-Training, Chapter III, and Appendix I, Section A, and the principles of tone-color as explained in Chapter XV.

While the diminished 7th-chord is not a constituent element of the diatonic major mode, yet it is very frequently used in compositions that are key-centred in that mode. In such cases, the VII^{7o} and its chord-of-resolution causes a new key-entity to emerge for a moment, giving the effect of a passing-key, or the VII^{7o} is used purely as a passing-chord without causing the real emergence of a key-entity differing from the chosen key-centre. These effects are clearly shown by segment A.

A

I *a* VII^{7°} I IV VII^{7°} *a* VI *b* *a* VII^{7°} VI *a* IV

(c VII°) I d VII° I I (g VII°) V⁷ VI IV (g VII°) (c VII°)
 b b a b a b

(d VII°) (g VII°) a VII° IV I (c VII°) I VII° VI V⁷ I
 a c b II a VI a b I

Segment A is clearly key-centred in **C**; with the exception of the diminished 7th-chords, not a single chord foreign to that key is used. The markings under the chords clearly indicate just which diminished 7th-chords cause brief transitions or passing-keys, and which ones are purely passing-chords which do not cause new key-entities to emerge. The simple passing-chord thus used, together with the key from which it is borrowed, is indicated by enclosing figure and key-sign in brackets. Every one of the brief transitions or passing-keys is very closely related to the key-centre, while the borrowed chords are borrowed from other keys that are more or less intimately associated with it.

As explained in *Harmony and Ear-Training*, Paragraphs 414 to 417, there are but three distinct diminished 7th-chords in music; various enharmonic changes may be made in these, yet the constituent tones in each chord-entity will remain the same, as shown by segments B, C, and D.

B



Build diminished 7th-chords on any three notes or tones that are in immediate proximity to one another, and all the twelve chromatic tones will have been used. Therefore it necessarily follows that any three distinct diminished 7th-chords founded on three such tones will contain **all** of the tones of any one diatonic scale, major or minor.

Build a diminished 7th-chord on 1 of a major scale, and it will contain 1 and 6 of that scale; build such a chord on 2 of the same scale, and it will contain 2, 4, and 7 of the scale; build the same kind of a chord on 3 of the same scale, and it will contain 3 and 5 of that scale. Hence it follows as a natural consequence that no matter which diminished 7th-chord is used in the major mode, at whatever pitch, the diminished 7th-chord will contain two of the important tones of that scale. A diminished 7th-chord built on 1 of a major scale contains the Point-of-Repouse and one of the Quality Tones; the diminished 7th-chord built on 2 of a major scale contains both the Characteristic Tones; and the diminished 7th-chord built on 3 of a major scale contains one of the Quality Tones, as well as the Insistent Tone. (See Harmony and Ear-Training for explanations of Point-of-Repouse, etc.)

Again, a diminished 7th-chord built on either 1 or 6 of a major scale will result in the same tonal combination; the ones built on 2, 4 or 7 are enharmonic equivalents; and the one built on either 3 or 5 will result in the same tones.

The three diminished 7th-chords that are distinct from one another show clearly that each key is very closely related to all other keys.

E F G H

I VI VII⁷ VI I VII⁷ VI I VII⁷ I I VII⁷ I

b b I a b a III VI III

I J K L

I (♯VII⁷) V I (♯VII⁷) V I (♯VII⁷) V⁷ I a VII⁷ I

a c b a a VI

M N O P

I a VII⁷ I I a VII⁷ VI I a VII⁷ VI I a VII⁷ IV

VI a b b c a II

IV

Q R S T

I a VII⁷ IV IV ♯VII⁷ V⁷ I ♯VII⁷ V⁷ VI ♯VII⁷ V⁷

a c a V c V c V

II

The musical notation is organized into three systems, each with two staves (treble and bass clef). Above each system are labels for the segments: U, V, W; X, Y, Z, AA; BB, CC, DD, EE. Below each system are the corresponding chord analyses.

System 1 (U, V, W):

- U:** Treble staff has two whole notes (F, C); Bass staff has two whole notes (F, Bb). Analysis: I (c VII^{7°}) I
- V:** Treble staff has two whole notes (F, C); Bass staff has two whole notes (F, Bb). Analysis: I (c VII^{7°}) I
- W:** Treble staff has two whole notes (F, C); Bass staff has two whole notes (F, Bb). Analysis: I b I b (c VII^{7°}) I a

System 2 (X, Y, Z, AA):

- X:** Treble staff has two whole notes (F, C); Bass staff has two whole notes (F, Bb). Analysis: I d VII^{7°} I II
- Y:** Treble staff has two whole notes (F, C); Bass staff has two whole notes (F, Bb). Analysis: I d VII^{7°} I a II
- Z:** Treble staff has two whole notes (F, C); Bass staff has two whole notes (F, Bb). Analysis: I (d VII^{7°}) V⁷ I b (b VII^{7°}) V⁷ a
- AA:** Treble staff has two whole notes (F, C); Bass staff has two whole notes (F, Bb). Analysis: I (b VII^{7°}) V⁷ I a

System 3 (BB, CC, DD, EE):

- BB:** Treble staff has two whole notes (F, C); Bass staff has two whole notes (F, Bb). Analysis: I (b VII^{7°}) V b
- CC:** Treble staff has two whole notes (F, C); Bass staff has two whole notes (F, Bb). Analysis: I (b VII^{7°}) V b
- DD:** Treble staff has two whole notes (F, C); Bass staff has two whole notes (F, Bb). Analysis: I (f VII^{7°}) IV a
- EE:** Treble staff has two whole notes (F, C); Bass staff has two whole notes (F, Bb). Analysis: I (f VII^{7°}) IV

Segments E to EE illustrate how the three distinct diminished 7th-chords may be used with C as the key-centre. Segments E to K illustrate the VII^{7°} that contains 1 and 6 of the key. Segments L to W show the VII^{7°} that contains 2, 4, and 7. Segments X to EE illustrate the VII^{7°} that contains 3 and 5 of the key. Each of these twenty-seven segments shows a diminished 7th-chord placed between two chords that are constituent elements of the chosen key-centre C. The markings under the chords clearly indicate the

218. B \flat . $\frac{4}{4}$ I - $\overset{7}{\text{VII}}^{\circ} - \left| \text{VI} - - \text{I} \right| (b\overset{7}{\text{VII}}^{\circ}) - \text{I} \overset{7}{\text{V}}^7 \left| \text{VI} - - - \right|$
 $\text{VI} \qquad \qquad \text{I}$
 IV ($f\overset{7}{\text{VII}}^{\circ}$) - V $\left| \text{III} - c\overset{7}{\text{VII}}^{\circ} - \left| \text{I} \text{I} - d\overset{7}{\text{VII}}^{\circ} \right| \text{VI} - \overset{7}{\text{V}}^7 - \left| \text{I} - \text{V} \text{I} \right| \right|$
 $\qquad \qquad \qquad \text{I}$
 II $\overset{7}{\text{VII}}^{\circ} - \text{I} \left| \text{I} - (f\text{VII}) \text{V} \left| d\overset{7}{\text{VII}}^{\circ} - \overset{7}{\text{VII}}^{\circ} - \left| \text{VI} g\overset{7}{\text{VII}}^{\circ} \text{I} d\overset{7}{\text{VII}}^{\circ} \right| \right| \right|$
 $\text{I} \qquad \qquad \text{II}$
 VI $c\overset{7}{\text{VII}}^{\circ} \text{I} \text{I} \left| \overset{7}{\text{V}}^7 - \overset{7}{\text{V}}^7 - \left| \text{I} - - - \right| \right|$ 219. G. $\frac{2}{4}$ I $\overset{7}{\text{VII}}^{\circ} \text{VI} \left| \text{I} \overset{7}{\text{V}}^7 \right|$
 $\text{a} \qquad \text{a} \qquad \text{II} \qquad \qquad \text{VI} \qquad \text{I}$
 $\widehat{\text{I}} \text{IV} e\overset{7}{\text{VII}}^{\circ} \text{I} \left| \overset{7}{\text{V}}^7 b\overset{7}{\text{VII}}^{\circ} \text{VI} \left| (f\# \overset{7}{\text{VII}}^{\circ}) \overset{7}{\text{V}}^7 (c\overset{7}{\text{VII}}^{\circ}) \left| \text{IV} \overset{7}{\text{V}}^7 \text{I} b\overset{7}{\text{VII}}^{\circ} \right| \right| \right|$
 $\text{b} \qquad \text{a} \qquad \text{a} \qquad \text{a} \qquad \text{c} \qquad \text{I} \qquad \text{b} \qquad \text{c} \qquad \text{a} \qquad \text{a}$
 $\text{VI} \qquad \qquad \text{I}$
 $\widehat{\text{VI}} \text{IV} \text{I} e\overset{7}{\text{VII}}^{\circ} \left| \text{I} \overset{7}{\text{V}}^7 \text{I} \right| \parallel$
 $\text{b} \qquad \text{a} \qquad \qquad \qquad \text{VI}$
 $\text{I} \qquad \qquad \text{VI}$

SECTION 4

MELODIES AFFORDING PASSING DIMINISHED 7TH-CHORDS

Reference to segments E to K in Section 3 will disclose the fact that 1 or 6 of a major scale, as well as the chromatic tone between 2 and 3, and the chromatic tone between 4 and 5, may be harmonized with the diminished 7th-chord built on either 1 or 6. Segments B to W show that 2, 4, or 7 of the major scale, as well as the chromatic tone between 5 and 6, may be harmonized with the diminished 7th-chord on 2, 4, or 7. Segments X to U show that 3 or 5 of the major scale, as well as the chromatic tones between 6 and 7, and 1 and 2, may all be harmonized with the diminished 7th-chord on either 3 or 5.

The following melodies offer opportunity for the use of the three distinct diminished 7th-chords; the chromatic tones, as well as

the diatonic tones, offer many possible solutions of harmonization, Several versions for each should be discovered and compared to determine which give the best results in sound.

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222



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SECTION 5

MODULATION

Each exercise begins in an initial key, modulates into variously related keys, and ends in the original key. Each modulation is made by means of a chord common to the two keys; that is, the chord used at the point of departure from one key into the next key is a chord having a dual relation, a chord that is a constituent element in both keys. In the case of the $VII^{7^{\circ}}$ the new key-relation is indicated by the usual key-sign; at such places enharmonic changes in the chord are necessary. Several other places demand enharmonic changes, but the dual marking in each case points the way. Several versions are possible for each exercise and the student should persist in his efforts until he has succeeded in making all the voice-parts effective.

227. e. $\frac{3}{4}$ $I - VII^{7^{\circ}} \left| VI - VII^{7^{\circ}} \right| I \overset{a}{V} \overset{a}{VI} \overset{b}{IV} \left| \overset{a}{V} - VII^{7^{\circ}} \right| VI - VI \left|$

$\underset{c}{V} \qquad \qquad \underset{b}{VI} \qquad \qquad \underset{a}{VI} \quad \underset{a}{I} \quad \underset{b}{V} \qquad \qquad \underset{c}{V} \qquad \qquad \underset{a}{V}$

$\text{VII}^{\circ}_7 - \text{VII}^{\circ}_7 \mid \text{VI } \overset{7}{V} \text{ IV} \mid \text{VII}^{\circ}_7 \text{ VII}^{\circ}_7 \overset{7}{V} \mid \text{I IV } \text{VII}^{\circ}_7 \mid \text{I VI } \text{VII}^{\circ}_7 \mid$
 $\text{b VII}^{\circ}_7 \quad \overset{c_7}{V} \overset{a}{V} \overset{7}{V} \overset{a}{I} \quad \text{b VII}^{\circ}_7 \overset{7}{V} \quad \text{V f\# VII}^{\circ}_7 \quad \text{V e VII}^{\circ}_7$

$\text{I IV IV} \mid \overset{7}{V} - - \mid \text{VI} - \text{VII}^{\circ}_7 \mid \text{VI} - - \mid \text{VI} - \text{VII}^{\circ}_7 \mid \text{VI} - - \mid$
 $\text{II} \quad \overset{7}{V} \quad \text{V} \quad \text{V}$

$\text{VI} - \text{VII}^{\circ}_7 \mid \text{VI} - \text{VII}^{\circ}_7 \mid \text{IV } \text{VII}^{\circ}_7 \text{ I} \mid \text{IV } \overset{7}{I} \text{ IV} \mid \text{III } \overset{7}{V} \overset{7}{V} \mid \text{IV } \overset{7}{I} - \parallel$
 $\text{V} \quad \text{V} \quad \text{I} \quad \overset{a}{I} \quad \text{b}$

228. C. $\frac{4}{4}$ $\text{I } \text{VII}^{\circ}_7 \text{ VI VI} \mid \text{II } \overset{7}{V} \text{ I} - \mid \text{I } \text{VII}^{\circ}_7 \text{ VI VI} \mid \text{II } \overset{7}{V} \text{ I} - \mid$
 $\text{V b VII}^{\circ}_7 \overset{c_7}{I} \quad \text{V f\# VII}^{\circ}_7 \overset{b}{I} \quad \text{V}$

$\text{V } \overset{7}{V} \text{ I } \text{VII}^{\circ}_7 \mid \text{IV } \overset{7}{V} \text{ I } \text{VII}^{\circ}_7 \mid \text{IV } \overset{7}{V} \text{ I } \text{VII}^{\circ}_7 \mid \text{VI VI I} - \mid \text{I } \text{VII}^{\circ}_7 \text{ VI VI} \mid$
 $\overset{c_7}{V} \overset{a}{b} \text{ VII} \overset{a}{I} \quad \text{f\# VII}^{\circ}_7 \overset{a_7}{I} \quad \text{f VII} \quad \text{V} \quad \text{V f VII}^{\circ}_7 \overset{c_7}{I} \overset{b}{b}$

$\text{II } \overset{7}{V} \text{ I} - \mid \text{I } \text{VII}^{\circ}_7 \text{ VI VI} \mid \text{II } \overset{7}{V} \text{ I} - \mid \text{V } \overset{7}{V} \text{ I } \text{VII}^{\circ}_7 \mid \text{IV } \overset{7}{V} \text{ I } \text{VII}^{\circ}_7 \mid$
 $\overset{a}{V} \text{ c VII}^{\circ}_7 \overset{b}{I} \quad \text{V} \quad \overset{c_7}{V} \overset{a}{a} \overset{a_7}{e} \text{ VII}^{\circ}_7 \overset{b}{I} \quad \text{I}$

$\text{VI } \overset{7}{V} \text{ I } \text{V} \mid \text{II } \overset{7}{V} \text{ I} - \parallel$ 229. $\text{eb. } \frac{3}{4}$ $\text{I} \mid \text{IV} - \text{VII}^{\circ}_7 \overset{7}{V} \mid \text{I} - \text{VI} \mid$
 $\overset{b}{I} \quad \overset{c}{I} \quad \overset{a}{I} \quad \text{I} \quad \overset{a_7}{V} \quad \text{I}$

$\text{IV} - \text{VII}^{\circ}_7 \overset{7}{V} \mid \text{I} - \text{VI} \mid \text{II} - \text{VII}^{\circ}_7 \overset{7}{V} \mid \text{VI } \overset{7}{V} \text{ I} \mid \text{II } \text{III } \text{II} \mid \text{VI } \text{V} - \mid$
 $\text{I} \quad \overset{a_7}{V} \quad \text{I} \quad \text{I} \quad \overset{a}{I} \quad \text{b} \quad \text{I} \quad \text{b} \quad \text{a} \quad \text{a} \quad \text{I} \quad \text{I}$

$\text{II} - \text{VII}^{\circ}_7 \overset{7}{V} \mid \text{I} - \text{V} \mid \text{I} - \text{VII}^{\circ}_7 \overset{7}{V} \mid \text{I} - \text{VI} \mid \text{IV} - \text{VII}^{\circ}_7 \overset{7}{V} \mid \text{I } \overset{7}{V} \text{ VI} \mid$
 $\text{I} \quad \text{V} \text{ V} \text{ V} \quad \overset{a_7}{V} \quad \text{I} \quad \text{VI eb VII} \quad \overset{c_7}{I} \quad \text{a} \quad \text{b} \quad \text{a}$

$\text{IV } \overset{7}{V} \text{ III} \mid \overset{7}{V} \text{ I} - \parallel$
 $\text{a} \quad \text{a}$

233. *c.* $\frac{3}{4}$ I - $\overset{7}{\text{VII}^\circ} \overset{7}{\text{V}}$ | I I $\overset{7}{\text{VII}^\circ} \overset{7}{\text{V}}$ | I - $\overset{7}{\text{VII}^\circ} \overset{7}{\text{V}}$ | I I $\overset{7}{\text{VII}^\circ} \overset{7}{\text{V}}$ |
 $\text{IV}_a \text{IV}_b \text{IV}_a \text{IV}_b \text{IV}_a \text{IV}_b$

I - $\overset{7}{\text{VII}^\circ} \overset{7}{\text{V}}$ | I I $\overset{7}{\text{V}}$ | I II $f^\# \overset{7}{\text{VII}^\circ}$ | IV I - | I - $\overset{7}{\text{VII}^\circ} \overset{7}{\text{V}}$ |
 $\text{IV}_a \text{IV}_b \text{IV}_a \text{IV}_b \text{IV}_a \text{IV}_b \text{IV}_a \text{IV}_b$

I I $\overset{7}{\text{VII}^\circ} \overset{7}{\text{V}}$ | I - $\overset{7}{\text{VII}^\circ} \overset{7}{\text{V}}$ | I I $\overset{7}{\text{VII}^\circ} \overset{7}{\text{V}}$ | I - $\overset{7}{\text{VII}^\circ} \overset{7}{\text{V}}$ | I I $\overset{7}{\text{VII}^\circ} \overset{7}{\text{V}}$ |
 $\text{IV}_a \text{IV}_b \text{IV}_a \text{IV}_b \text{IV}_a \text{IV}_b \text{IV}_a \text{IV}_b$

VI IV $\overset{7}{\text{V}}$ | IV I - ||
 $\text{IV}_a \text{IV}_b \text{IV}_a \text{IV}_b$

SECTION 6

MELODIES OFFERING OPPORTUNITIES FOR MODULATION

These melodies offer full opportunity for modulation into various related keys, which may be effected by means of diminished 7th-chords. Several versions are possible for each exercise, and the student should persist in his efforts until he has a good harmonic development of ideas.

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PART VI
THE SECONDARY SEVENTH CHORDS
SECTION 1
THE SECONDARY 7TH-CHORDS IN MAJOR

Before attempting the working out of this Part, the student should familiarize himself with the explanation of the secondary 7th-chords as found in Harmony and Ear-Training, Chapter XII.

The secondary 7th-chords afford opportunity for considerable widening of the horizon of harmonic motives and effectiveness. Three distinct types of secondary 7th-chords are found in the major mode; namely, the diminished triad plus the minor Seventh, as exemplified by the VII⁷; the minor triad plus the minor Seventh, of which the II⁷, the III⁷, and the VI⁷ are examples; and finally the major triad plus the major Seventh, as exemplified by the I⁷ and the IV⁷. Each of these types has its own character, varying from the VII⁷ which is the least harsh in effect, to the IV⁷ and I⁷ which are quite harsh. In addition to the quality of the chord as found in fundamental form, the various forms and inversions of each as well as the context, add to the powers of expression.

Modern music is full of secondary 7th-chords, and in the great majority of cases the introduction, as well as the progression or resolution of such chords, is very free from pedantic restraint. It is an old regulation found in the great majority of text-books that the dissonant element in such chords, the Seventh, must be prepared; that is to say that if the I⁷ in C were to be used, (C-E-G-B) the B is the dissonant tone, and this tone must first be heard as a part of a concord before it is used as a part of the discord, thus

D-G-B, followed by C-E-G-B. In addition to this regulation it was laid down as law that each of these chords must resolve into a certain thing, as the VII⁷ into V or V⁷; the II⁷ into V, etc. An examination of a vast amount of music, even as far back as Bach, shows that such restrictions were not observed by composers who worked effectively, or whose works stand out as great. If the composer wills it, he may use all the tonal material as he sees fit; if he wishes to carry out an emotional scheme in tone, if he wishes to work out a harmonic or melodic sequence, or if the logical development of his creative ideas demands it, he may prepare the dissonance or not, he may cause the chords to progress as he wishes, and if he gets the effect, and conveys it to his audience, the end justifies his means, always provided of course that his ideas are worth while, and that he has something to say. Hence, the student need no longer be handicapped by rules and regulations that he must forget before he can be original, rules that have been discarded by composers for many long years. The very acidity and harshness of the secondary 7th-chords will add marvelously to the effect of the progression, or to the ultimate chord-of-resolution.

The possibilities of introduction, progression, and resolution of these chords are well-nigh unlimited, and it would be a colossal as well as a useless effort to attempt to indicate all such, but the 112 segments that are presented here will doubtless prove sufficient to enable the student to grasp the principles that underlie them, as well as to stimulate him to continued effort. Each measure in these 112 segments may be played forwards or backwards, thus indicating some of the possibilities of introduction as well as of progression.

Segments 1 to 25 illustrate some of the possibilities of VII⁷, where resolution or progression into triads, as well as into V⁷ and other secondary 7th-chords, is seen. The consecutive Fifths in segments 6, 9, 13, 15, 23, 24, and 25 are all good.

THE SECONDARY SEVENTH CHORDS

125

2 3 4 5 6

VII⁷ I VII⁷ I VII⁷ V⁷ VII⁷ IV VII⁷ I VII⁷ I

a b

7 8 9 10 11 12

VII⁷ V⁷ VII⁷ V⁷ VII⁷ I VII⁷ V⁷ VII⁷ V⁷ VII⁷ VI

c a

13 14 15 16 17 18

VII⁷ I VII⁷ I VII⁷ I VII⁷ IV VII⁷ II⁷ I VII⁷ V⁷

a a b a a a b a c

19 20 21 22 23

VII⁷ I VII⁷ IV⁷ I VII⁷ II⁷ IV I VII⁷ VI VII⁷ VI

c a b b

24 25 26 27 28

II⁷ V⁷ II⁷ II⁷ I II⁷ I

b c

VII⁷ I VII⁷ I

Segments 26 to 54 illustrate some of the possibilities of the introduction and progression of II^7 in various forms and inversions. The consecutive Fifths in segments 28, 31, 35, and 49 are good.

The musical score consists of four systems, each with a treble and bass staff. Chord symbols and inversions are written below the notes.

System 1 (Segments 29-35):

- 29: II^7 b
- 30: IV b
- 31: II^7 b
- 32: V^7
- 33: II^7 a
- 34: I a
- 35: II^7 a

System 2 (Segments 36-42):

- 36: II^7 a
- 37: I a
- 38: II^7 a
- 39: I b
- 40: II^7 a
- 41: I b
- 42: II^7 a

System 3 (Segments 43-49):

- 43: II^7 b
- 44: VI a
- 45: II^7 a
- 46: I b
- 47: II^7 a
- 48: VII^7 b
- 49: II^7 b

System 4 (Segments 50-54):

- 50: II^7 b
- 51: III c
- 52: II^7 a
- 53: I
- 54: II^7 a

System 5 (Segments 55-61):

- 55: II^7 b
- 56: III c
- 57: II^7 a
- 58: I
- 59: II^7 a
- 60: IV^7 b
- 61: II^7 a

System 6 (Segments 62-68):

- 62: VI a
- 63: II^7 c
- 64: VII^7 c
- 65: II^7 b
- 66: I
- 67: II^7 a
- 68: I

Segments 55 to 69 show some of the possibilities of VI⁷.

55 56 57 58 59 60

VI⁷ V⁷ VI⁷ V⁷
a

VI⁷ V⁷ VI⁷ V VI⁷ II⁷ VI⁷ II⁷
c c b a c

61 62 63 64 65 66

VI⁷ IV VI⁷ VII⁷ VI⁷ II⁷ VI⁷ I VI⁷ III V⁷ VI⁷ IV⁷
c c b a a

Segments 70 to 84 illustrate some of the possibilities of III⁷.

67 68 69 70 71

III⁷ I III⁷ I
a c

VI⁷ II⁷ VI⁷ V⁷ I VI⁷ I VI⁷ VII⁷
a b b a a b

72 73 74 75 76 76a 77

III⁷ V⁷ III⁷ VI⁷ III IV III⁷ IV III⁷ II⁷ III⁷ II⁷
c b c a b b a c

III⁷ IV

78 79 80 81 82 83 84

III⁷ IV III I III⁷ I⁷ III⁷ VI⁷ III⁷ V⁷ III⁷ II⁷ III⁷ V⁷
 a a b c b a a b c b

Segments 85 to 99 show some of the possible progressions and resolutions of I⁷. The Consecutive Fifths in segments 88, 91, 95, and 97 are all possible and effective.

85 86 87 88 89

I⁷ I I I⁷ VI I⁷ IV I⁷ VII⁷ I⁷ IV
 a a c a

90 91 92 93 94 95

I⁷ VI⁷ I⁷ IV I⁷ VII⁷ I⁷ VI⁷ I⁷ VI I⁷ IV
 a b a c c b

96 97 98 99

I⁷ IV I I⁷ VII⁷ I I I⁷ VI⁷ I V⁷ I⁷ IV
 b a a c a b b

Segments 100 to 112 illustrate some of the possibilities of IV^7 . The consecutive Fifths in 103 are good.

100 101 102 103 104 105 106

IV^7 II^7 IV^7 VI^7 IV^7 VII^7 IV^7 V^7 IV^7 VII^7 IV^7 II^7 IV^7 V^7

a c b c b b c b a

107 108 109

VI IV^7 I I IV^7 VII^7 I I^7 VI^7 IV^7

a a c c

110 111 112

II^7 IV^7 II^7 VI I IV^7 I IV VII^7 IV^7 I

a b a a b a b

Many of these progressions are decidedly harsh, but as stated before, this very harshness adds to their effectiveness. Many a simple melodic idea has been enriched and made possible by having been conceived as a part of such an harmonic idea, and the effectiveness of much noble music is based upon the wise and judicious use of such harmonic material. It is very true that many such progressions are a growth of passing-tones and passing-chords; nevertheless, at the moment of their occurrence they form these secondary 7th-chords, and if the working out of the musical ideas was only along lines of simple progressions, the possibilities of harmonic motives would have been exhausted long ago.

Each of these 112 segments is an actual possibility from the following exercises, and they show the unlimited range of choice at the disposal of the student. Naturally many versions are possible for each exercise, and the student should persist in his efforts until he has discovered at least two that are musical, and in which the voice-parts have a genuine melodic outline.

238. C, E \flat . $\frac{6}{8}$ I - VII⁷ I V⁷ - | II II⁷ V⁷ VII⁷ I - | I - I⁷ VI V⁷ VI |
 II⁷ II⁷ II⁷ I V - | I I VII⁷ I VI - | V⁷ VI⁷ V VII⁷ I - |
 I - I⁷ IV I II | I I II I - - || 239. E, B. $\frac{3}{4}$ I . I⁷ VI⁷ | I - II⁷ |
 V⁷ . VII⁷ IV⁷ VII⁷ | VII⁷ V⁷ VII⁷ | I . I⁷ VI⁷ | IV V⁷ III | II⁷ II⁷ II⁷ |
 I V VII⁷ | I . I⁷ VI⁷ | I - II⁷ | V⁷ . VII⁷ IV⁷ VII⁷ | VII⁷ V⁷ VII |
 V⁷ . II⁷ VII⁷ V⁷ | II . V⁷ II⁷ II⁷ | I II V | I - - ||
 240. D \flat , B \flat . $\frac{4}{4}$ I - VI⁷ - | III - V⁷ - | VI - IV⁷ - | I - III⁷ - | IV - IV - |
 VII⁷ - I - | II⁷ - I - | II - V⁷ - | I - I⁷ - | VI⁷ - IV⁷ - | II - II⁷ - |
 VII⁷ - V⁷ - | VII - VII⁷ - | V⁷ - V⁷ - | VI - II⁷ - | I - - - ||
 241. G \flat , A \flat . $\frac{3}{4}$ I . I⁷ IV I | II⁷ II⁷ VII⁷ - | V⁷ . V⁷ III VII⁷ | IV⁷ V⁷ I - |
 I . I⁷ VII⁷ I | IV⁷ VII⁷ I . II⁷ | III III⁷ V⁷ I VII⁷ | II⁷ I - ||
 242. F, D. $\frac{4}{4}$ I - I⁷ VI⁷ | II⁷ IV⁷ II⁷ VI | II⁷ VII⁷ V⁷ |
 I V⁷ I V⁷ | I - I⁷ VI⁷ | II⁷ II⁷ II⁷ II⁷ | I V⁷ I⁷ IV | VI⁷ V⁷ I - ||

243. $B^b, F^\sharp. \frac{4}{2}$ $I \overset{7}{I} \overset{7}{VI} \overset{7}{I} | \overset{7}{VI} \overset{7}{V} \overset{7}{I} \overset{7}{VII} | I \overset{7}{IV} \overset{7}{I} \overset{7}{V} \overset{7}{V} | \overset{7}{VI} \overset{7}{II} \overset{7}{VI} \overset{7}{III} \overset{7}{III} |$
 $\underset{a}{a} \underset{a}{b} \underset{a}{b} \underset{a}{b} \underset{a}{a} \underset{b}{b} \underset{a}{a} \underset{b}{b} \underset{a}{a}$

IV $\overset{7}{VII} \overset{7}{IV} \overset{7}{I} | \overset{7}{VII} \overset{7}{II} \overset{7}{IV} \overset{7}{I} ||$ 244. $A^b, F. \frac{6}{8}$ $I \overset{7}{II} \overset{7}{I} \overset{7}{I} - \overset{7}{V} |$
 $\underset{a}{a} \underset{b}{b} \underset{b}{b} \underset{a}{a}$

VI $\overset{7}{VII} \overset{7}{VI} \overset{7}{VI} - \overset{7}{III} | \overset{7}{IV} \overset{7}{V} \overset{7}{IV} \overset{7}{IV} - \overset{7}{I} | II \overset{7}{II} \overset{7}{II} \overset{7}{II} \overset{7}{I} \overset{7}{V} - |$
 $\underset{a}{a} \underset{b}{b} \underset{a}{b} \underset{b}{b} \underset{b}{b} \underset{a}{a}$

I $\overset{7}{II} \overset{7}{I} \overset{7}{IV} - \overset{7}{V} | I \overset{7}{VII} \overset{7}{I} \overset{7}{VI} - \overset{7}{II} | \overset{7}{VI} \overset{7}{VII} \overset{7}{VII} \overset{7}{VI} \overset{7}{II} \overset{7}{I} | \overset{7}{II} \overset{7}{I} \overset{7}{V} \overset{7}{I} - - ||$
 $\underset{a}{a} \underset{b}{b} \underset{b}{b} \underset{a}{a} \underset{b}{b} \underset{b}{b} \underset{b}{b} \underset{b}{b}$

SECTION 2

THE SECONDARY 7TH-CHORDS IN MINOR

The harmonic minor mode offers two additional types of secondary 7th-chords; the I^7 , built of a minor chord and a major Seventh, and the III^7 , built of an augmented chord with a major Seventh; both of these chords are very harsh.

In the normal minor mode the I^7 may be used very effectually, as seen in segments 1 and 2; if it is desired to cause the Seventh of I^7 to descend, it is quite necessary that the chord as found in normal minor be used. In the ascending melodic minor scale the VI^7 on the chromatically raised 6 may be used with good effect, as seen in segment 3.

The following 29 segments partially illustrate some of the possibilities of these chords. Many of these progressions are decidedly harsh, but it remains as an axiom that the chord-of-resolution will sound stronger, sweeter, and more satisfactory on this account. As was explained in Section 1, composers have discarded the theoretical obligation of preparing the seventh of these chords, hence no rules or obligations are here laid down.

The consecutive Fifths in segments 10, 19, 20, 21 and 23 are effective and entirely permissible. It was formerly the custom for theorists to interdict freedom of entrance and of progression of such chords, particularly the harsher ones, but a wide acquaintance with modern music will show conclusively that whenever

the composer desired an effect, he brushed aside all pedanticisms of that kind. Hence, in these 29 segments free latitude of progression is indicated.

The musical score consists of 29 segments, numbered 1 through 24, arranged in four groups. Each segment is represented by a treble and bass staff. The chords are indicated by Roman numerals and figured bass notation (a, b, c) below the staves.

Segment 1: Treble: I^7 IV I II^7 V^7 V^7 VI^7 V^7 II^7 I II^7 I II^7 VI
 Bass: b c b a a a b a a b b

Segment 2: Treble: II^7 I II^7 IV^7 VII^7 II^7 VII^7 II^7 I VI VI^7 VII^7 IV III^7 VI
 Bass: b b b a c a a a c

Segment 3: Treble: VI VI^7 IV VI^7 VII^7 IV^7 II^7 VII^7 IV^7 V^7 IV^7 V^7 I I I^7 IV^7 I
 Bass: a c b c c b c b b b

Segment 4: Treble: IV^7 V^7 IV^7 V^7 IV^7 V^7 III^7 VI II^7 I VI^7 I V^7
 Bass: a a b a a a c b

I I⁷ IV⁷ I I VI I⁷ I IV⁷ I II⁷ I I I⁷ VI VI⁷ IV

It is true that the effectiveness of any chord may be heightened or lessened by pitch, by the relations of the constituent tones, and by the key in which it is placed. A careful study of secondary 7th-chords will clearly show that these factors play a very important part in the particular qualities of these chords. Certain secondary 7th-chords will have rather a dead effect in some relations, while in other relations and positions they will be full of color and suggestiveness.

For this reason the student should transpose each of the following exercises into various keys, and work out several versions for each, until he has discovered the best forms and key-relations for the chords. In working out these exercises the student should persist until he has secured a version that allows a distinct melody in the upper voice-part, and a definable melodic outline to each of the other voice-parts.

245. *g, e^b.* $\frac{3}{4}$ $\overset{7}{V} \overset{7}{II} \overset{7}{V} | I \cdot \overset{7}{I} I | I \overset{7}{II} I | IV \cdot \overset{7}{II} I | VI \overset{7}{VI} \overset{7}{VII}^{\circ} |$
 $\overset{7}{III} \cdot \overset{7}{IV} \overset{7}{III} | VI \overset{7}{VI} \overset{7}{IV} I \overset{7}{V} | VI \overset{7}{IV} \overset{7}{II} \overset{7}{V} | \overset{7}{V} \overset{7}{II} \overset{7}{V} | I \cdot \overset{7}{I} I |$
 $\overset{7}{IV} I \overset{7}{II} | I \cdot \overset{7}{V} I | \overset{7}{V} I \overset{7}{IV} \overset{7}{V} | I - - ||$ 246. *f[#], e.* $\frac{4}{4}$ $I - \overset{7}{I} \cdot \overset{7}{IV} |$
 $I \cdot \overset{7}{IV} I - | VI - \overset{7}{I} \cdot \overset{7}{IV} | I \cdot \overset{7}{IV} I - | IV - \overset{7}{V} \overset{7}{V} | I \overset{7}{VII}^{\circ} \overset{7}{VI} \overset{7}{II} |$
 $I - \overset{7}{V} - | I IV \overset{7}{V} - | I - \overset{7}{I} \cdot \overset{7}{IV} | I \cdot \overset{7}{IV} I - | VI - \overset{7}{I} \cdot \overset{7}{IV} |$
 $I \cdot \overset{7}{IV} I - | I - \overset{7}{II} - | I \overset{7}{IV} I \overset{7}{II} | I^{\circ} - \overset{7}{IV} \overset{7}{II} | I - - - ||$

247. *a, f.* $\frac{4}{4}$ I. $\widehat{\text{I}} \text{IV}^7 \text{II}^7 \mid \text{I} \cdot \widehat{\text{I}} \text{IV}^7 \text{VII}^7 \mid \text{I} \cdot \widehat{\text{IV}}^7 \text{III} \text{V}^7 \mid \text{VI} \text{VI} \text{V} \text{V} \mid$
 $\text{I} \cdot \widehat{\text{I}}^7 \text{VI} \text{VI}^7 \mid \text{IV} \cdot \widehat{\text{IV}}^7 \text{V} \text{VII}^7 \mid \text{I} \cdot \widehat{\text{V}} \text{I} \text{II}^7 \mid \text{I} \text{II}^7 \text{V}^7 \text{I} - \parallel$
 248. *c, b \flat .* $\frac{3}{4}$ I $\text{II}^7 - \mid \text{I} \text{II}^7 - \mid \text{I} \text{IV} \text{IV}^7 \mid \text{V} - - \mid \text{IV}^7 \text{VII}^7 - \mid \text{I} \text{II}^7 - \mid$
 $\text{VI}^7 \text{I} \text{V}^7 \mid \text{I} - - \parallel$

SECTION 3

MELODIES FOR HARMONIZATION

The following melodies will afford great opportunity for the use of secondary 7th-chords, both in major and in the various forms of the minor mode. Several versions are possible for each melody, and the student should discover and compare these to determine which will give the best effect.

249



250

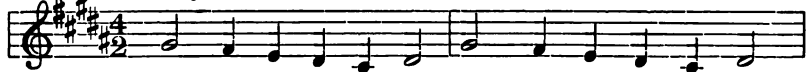


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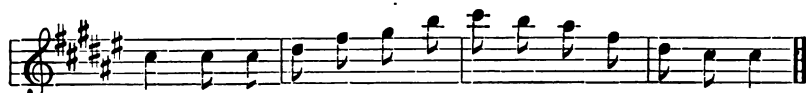
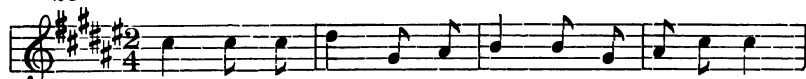
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SECTION 4

MODULATION

The secondary 7th-chords, on account of the multiplicity of their possible key-relations, offer a wide field for modulation. As a full exposition of the varied relations of these chords is given in Harmony and Ear-Training, Chapter XII, it is not necessary to repeat that explanation.

The various relations of these chords are fully illustrated and worked out in the following exercises. In some of these the key changes are very rapid; in fact the key-entities glide by with such rapidity in some of the exercises, that they are merely key-suggestions, and do not become thoroughly established. Nevertheless, a sufficient number of chord-entities are used to clearly indicate such key-entities though they are immediately forsaken for others.

At least three versions should be discovered for each exercise, and the student should persist in his efforts until he has succeeded in evolving melodious and interesting voice-parts for all four voices.

$$261. \text{ C } \frac{3}{4} \text{ I } \left| \begin{array}{c} \text{VII}^7 \text{ VII}^{\circ} \\ \text{II}^7 \quad \text{a} \end{array} \right| \begin{array}{c} \text{IV}^7 \text{ VII}^{\circ} \text{ V}^7 \\ \text{b} \quad \text{c VII}^7 \\ \text{I} \end{array} \left| \begin{array}{c} \text{VI VI II} \\ \text{a} \end{array} \right| \begin{array}{c} \text{VII}^7 \text{ V}^7 \text{ VI} \\ \text{b}_7 \quad \text{I} \end{array} \left| \right.$$

$$\begin{array}{c} \text{VII}^7 \text{ VII}^{\circ} \text{ I} \\ \text{II}^7 \quad \text{a} \end{array} \left| \begin{array}{c} \text{IV}^7 \text{ VII}^{\circ} \text{ V}^7 \\ \text{b} \quad \text{c\# VII}^{\circ} \\ \text{I} \end{array} \right| \begin{array}{c} \text{VI VI II} \\ \text{a} \end{array} \left| \begin{array}{c} \text{VII}^7 \text{ V}^7 \text{ VI} \\ \text{b}_7 \quad \text{I} \end{array} \right| \begin{array}{c} \text{II}^7 \text{ II}^7 \text{ II}^7 \\ \text{b}_7 \quad \text{VI VI} \end{array} \left| \right.$$

$$\begin{array}{c} \text{VI I}^7 \text{ II} \\ \text{a} \end{array} \left| \begin{array}{c} \text{VI VI}^7 \text{ IV} \\ \text{c} \end{array} \right| \text{I} - \parallel 262. \text{ a. } \frac{4}{4} \text{ I} - \begin{array}{c} \text{I}^7 \\ \text{c} \end{array} - \left| \begin{array}{c} \text{VI} - \text{VII}^7 - \\ \text{I} \end{array} \right| \text{I} - \begin{array}{c} \text{I}^7 \\ \text{c} \end{array} - \left| \right.$$

$$\begin{array}{c} \text{VI} - \text{VII}^{\circ} - \\ \text{I} \end{array} \left| \begin{array}{c} \text{I} - \text{I}^7 - \\ \text{c} \end{array} \right| \begin{array}{c} \text{VI} - \text{II}^7 - \\ \text{I} \end{array} \left| \begin{array}{c} \text{VI} - \text{II}^7 - \\ \text{b} \quad \text{a} \end{array} \right| \text{V} - - - \left| \begin{array}{c} \text{I} - \text{I}^7 - \\ \text{c} \end{array} \right| \begin{array}{c} \text{VI} - \text{VII}^7 - \\ \text{c}_7 \quad \text{II} \end{array} \left| \right.$$

$$\text{I} - \begin{array}{c} \text{I}^7 \\ \text{c} \end{array} - \left| \begin{array}{c} \text{VI} - \text{VII}^{\circ} - \\ \text{c}_7 \quad \text{a VII}^{\circ} \end{array} \right| \begin{array}{c} \text{I} - \text{II}^7 - \\ \text{a} \end{array} \left| \begin{array}{c} \text{I} - \text{II}^7 - \\ \text{a} \end{array} \right| \begin{array}{c} \text{I} - \text{II}^7 \text{ V}^7 \\ \text{b} \quad \text{b} \end{array} \left| \text{I} - - - \parallel \right.$$

$$263. \text{ Ab. } \frac{4}{4} \text{ I} \cdot \begin{array}{c} \text{I}^7 \text{ VI}^7 \text{ V}^7 \\ \text{c} \quad \text{II}^7 \quad \text{b} \end{array} \left| \begin{array}{c} \text{I} \text{ I}^7 \text{ VI}^7 \text{ V}^7 \\ \text{II}^7 \quad \text{a}_7 \quad \text{c} \end{array} \right| \text{I} \cdot \begin{array}{c} \text{I}^7 \text{ VI}^7 \text{ V}^7 \\ \text{a} \quad \text{b}_7 \quad \text{II}^7 \end{array} \left| \begin{array}{c} \text{VI VI V} - \\ \text{b} \quad \text{I} \quad \text{I} \end{array} \right| \left.$$

$$\text{I} \cdot \begin{array}{c} \text{I}^7 \text{ VI}^7 \text{ V}^7 \\ \text{c} \quad \text{II}^7 \quad \text{b} \end{array} \left| \begin{array}{c} \text{I} \text{ I}^7 \text{ VI}^7 \text{ V}^7 \\ \text{a}_7 \quad \text{b}_7 \quad \text{IV V} \end{array} \right| \text{IV} \cdot \begin{array}{c} \text{I}^7 \text{ IV II} \\ \text{a} \quad \text{b} \end{array} \left| \begin{array}{c} \text{I VII}^7 \text{ I} - \\ \text{b} \end{array} \right| \parallel$$

268. C. $\frac{9}{8}$ I - $\overset{7}{\underset{\text{c}_7 \text{ b}}{\text{II}}} \overset{7}{\underset{\text{a}}{\text{V}}} \overset{7}{\underset{\text{b}}{\text{VII}}} \overset{7}{\text{V}}$ | I - $\overset{7}{\underset{\text{c}_7 \text{ b}}{\text{II}}} \overset{7}{\underset{\text{a}}{\text{V}}} \overset{7}{\underset{\text{b}}{\text{VII}}} \overset{7}{\text{V}}$ | I - $\overset{7}{\underset{\text{c}_7 \text{ b}}{\text{II}}} \overset{7}{\underset{\text{a}}{\text{V}}} \overset{7}{\underset{\text{b}}{\text{VII}}} \overset{7}{\text{V}}$ |
 III III III

$\widehat{\text{I}} - \overset{7}{\underset{\text{b}}{\text{VI}}} \overset{7}{\text{V}} \text{I} - -$ | I - $\overset{7}{\underset{\text{c}_7 \text{ b}}{\text{II}}} \overset{7}{\underset{\text{a}}{\text{V}}} \overset{7}{\underset{\text{b}}{\text{VII}}} \overset{7}{\text{V}}$ | I - $\overset{7}{\underset{\text{c}_7 \text{ b}}{\text{II}}} \overset{7}{\underset{\text{a}}{\text{V}}} \overset{7}{\underset{\text{b}}{\text{VII}}} \overset{7}{\text{V}}$ |
 III III III

I - $\overset{7}{\underset{\text{c}_7 \text{ b}}{\text{II}}} \overset{7}{\underset{\text{a}}{\text{V}}} \overset{7}{\underset{\text{b}}{\text{VII}}} \overset{7}{\text{V}}$ | I - $\overset{7}{\text{V}} \overset{7}{\text{VI}} - -$ | I - $\overset{7}{\underset{\text{c}_7 \text{ b}}{\text{II}}} \overset{7}{\underset{\text{a}}{\text{V}}} \overset{7}{\underset{\text{b}}{\text{VII}}} \overset{7}{\text{V}}$ |
 III V V^7 I III

I - $\overset{7}{\underset{\text{c}_7 \text{ b}}{\text{II}}} \overset{7}{\underset{\text{a}}{\text{V}}} \overset{7}{\underset{\text{b}}{\text{VII}}} \overset{7}{\text{V}}$ | I - $\overset{7}{\underset{\text{c}_7 \text{ b}}{\text{II}}} \overset{7}{\underset{\text{a}}{\text{V}}} \overset{7}{\underset{\text{b}}{\text{VII}}} \overset{7}{\text{V}}$ | I - $\overset{7}{\underset{\text{c}}{\text{II}}} \overset{7}{\underset{\text{a}}{\text{V}}} \text{I} - -$ ||
 III III

269. G. $\frac{9}{4}$ I - $\overset{7}{\underset{\text{c}_7}{\text{III}}} \overset{7}{\underset{\text{b}_7}{\text{II}}} - \overset{7}{\underset{\text{V}}{\text{V}}}$ | I - $\overset{7}{\underset{\text{c}_7}{\text{III}}} \overset{7}{\underset{\text{b}_7}{\text{II}}} - \overset{7}{\underset{\text{V}}{\text{V}}}$ | I - $\overset{7}{\underset{\text{c}_7}{\text{III}}} \overset{7}{\underset{\text{b}_7}{\text{II}}} - \overset{7}{\underset{\text{V}}{\text{V}}}$ |
 IV^7 V^7 IV^7 V^7 IV^7 V^7

I $\overset{7}{\text{V}}$ I $\overset{7}{\underset{\text{a}_7}{\text{VII}}} \overset{7}{\text{V}} -$ | $\overset{7}{\underset{\text{a}}{\text{VI}}} \overset{7}{\text{VI}}$ $\overset{7}{\underset{\text{c}_7}{\text{III}}} \overset{7}{\underset{\text{b}_7}{\text{II}}} - \overset{7}{\underset{\text{V}}{\text{V}}}$ | I - $\overset{7}{\underset{\text{c}_7}{\text{III}}} \overset{7}{\underset{\text{b}_7}{\text{II}}} - \overset{7}{\underset{\text{V}}{\text{V}}}$ |
 V V^7 II V^7 I IV^7 V^7 IV^7 V^7

I - $\overset{7}{\underset{\text{c}_7}{\text{III}}} \overset{7}{\underset{\text{b}_7}{\text{II}}} - \overset{7}{\underset{\text{V}}{\text{V}}}$ | I $\overset{7}{\text{V}}$ I $\overset{7}{\underset{\text{a}_7}{\text{VII}}} \overset{7}{\text{V}} -$ | $\overset{7}{\underset{\text{a}}{\text{VI}}} \overset{7}{\text{VI}}$ $\overset{7}{\underset{\text{c}_7}{\text{III}}} \overset{7}{\underset{\text{b}_7}{\text{II}}} - \overset{7}{\underset{\text{V}}{\text{V}}}$ |
 IV^7 V^7 V V^7 II V^7 I IV^7 V^7

I - $\overset{7}{\underset{\text{c}_7}{\text{III}}} \overset{7}{\underset{\text{b}_7}{\text{II}}} - \overset{7}{\underset{\text{V}}{\text{V}}}$ | I $\overset{7}{\underset{\text{a}}{\text{IV}}} \overset{7}{\text{II}} \overset{7}{\text{V}} \overset{7}{\text{VI}} \overset{7}{\text{IV}}$ | I - $\overset{7}{\text{V}} \text{I} - -$ ||
 IV^7 V^7 III

SECTION 5

PASSING-CHORDS. PASSING-KEYS. KEY-CENTRES

The principles of borrowing chords, and the expansion of the chosen key-centre, may be extended to the secondary 7th-chords, as well as to all the preceding chord formations.

The three following segments will illustrate the possibilities latent in a plain diatonic harmonic and melodic idea. Segment A is strictly in the key of **D**, not a tone foreign to that key being seen

or heard, while segments B and C are developments of the same material. It is very true that many of the secondary 7th-chords in segment A may be considered as the result of passing-tones, or suspensions, or perhaps even anticipations; yet it is nevertheless true that perfectly definite 7th-chords within the key occur, and that they should be so designated.

A

Chord progressions for Segment A:

System 1: I, II⁷_a, I_a, I, I_a, IV⁷, V, V⁷, VI, I⁷_b, II_a

System 2: I_a, III⁷, VI⁷_b, IV, VI⁷_b, II⁷, VI_a, I⁷, IV⁷_b

System 3: II_b, IV⁷_b, VII⁷, IV_a, VI⁷_b, II⁷_b, V⁷, VII⁷_b, IV_b, I

It should be noticed that segment A shows a 7th-chord on each degree of the scale, that each voice-part is singable and melodious, and that the 7th-chords enter and progress freely, sometimes with preparation, sometimes without. Further, it should be noticed that 7th-chords succeed one another quite freely. The markings under the chords clearly indicate their forms and key-relation.

B

I (d II⁷) I I I A VII⁷ I b VII⁷ I (E VII⁷) IV
 a a a a a a a a
 II

I G VII⁷ (b) I I⁷ VI⁷ VI I⁷ III⁷ I IV VII
 a c II⁷ a b II b

I VII⁷ V⁷ D V⁷ V⁷ II⁷ VII⁷ V⁷ d II⁷ D I
 V II⁷ b a c a b

In segment B the soprano melody of segment A is kept intact, except the one chromatic change in the sixth measure. It is plainly evident that segment B is key-centred in the key of D, but the markings under the chords clearly indicate the points of brief departure into other more or less related keys. The marking under the second chord indicates a borrowed secondary 7th from *d*, but it might as well have been borrowed from *g*, for both keys,

d and *g*, are closely related to the key-centre. In fact, if we should consider that chord as borrowed from *g*, a clear emergence of *g* would be seen, for the next chord could be considered as V in *g*. The second chord in measure five is a secondary 7th-chord caused by a chromatic passing-tone in the tenor, and its marking indicates a borrowed chord from *E*, but it might have been borrowed from *c*♯ as well. The last chord in measure six is a 2-♯4-♯6-chord on C in an inverted form, sometimes termed "a dominant 7th-chord with a raised Fifth." The penultimate chord in measure twelve is a double suspension, D in the bass held back by E, and F♯ in the tenor held back by G.

The conventional explanation of such chromatic inflections as "altered secondary-7th-chords" seems to lead to utter confusion, for in some cases the alterations result in dominant 7th-chords, in others in diminished 7th-chords, and in others in secondary 7th-chords of a different type from the unaltered chord; the result would seem to confound all kinds of 7th-chords, and to ignore utterly the rapid changes of key, and the rapid emergence and disappearance of the various key-entities.

A first glance at segment c will create the impression of a riot of chromaticisms, but even there it should be noticed that the soprano melody of segment A is kept intact except for three slight chromatic inflections, one each in measures five, six, and nine. The last passing-tone in measure nine causes a chord to appear consisting of C-G-A♯-E♭, which is the enharmonic equivalent of a secondary 7th C-E♭-G-B♭. The last chord in measure ten is a 3-♯4-♯6-chord on B♭. The first chord on the third pulse of measure eleven, B♯-G-B♭-E, is the enharmonic equivalent of a dominant 7th-chord on C, C-E-G-B♭. These seeming misspellings are not such in fact, but are due to a plan of writing which is easier for the eye to follow. The cadence in segment c may be considered as a perverted form of a plagal cadence, though this explanation is pure theory, while the chords are simple facts.



It should be plainly evident by this time that there are many things in the combinations of musical tones comparatively simple in themselves, which are from a musico-logical standpoint very natural; yet these same things are exceedingly difficult of explanation in language, and very hard to fit into our somewhat narrow and restricted theoretical explanations of musical phenomena.

It is not at all necessary to discard any of the accretions of the centuries that are sensible in themselves, but it is needful that we see and recognize the advancement of the times, and make room for the newer methods, no matter whether they agree with what is conventional or not. It is not at all necessary either to destroy or to revolutionize the good of the past; but we must accept the new that is valid, and revise our methods of convention sufficiently to take in and classify this material.

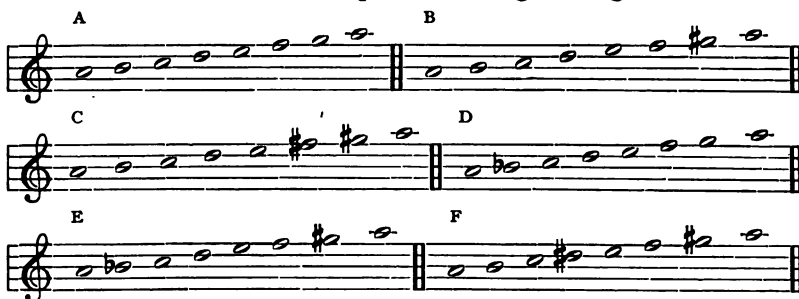
SECTION 6

SOME POSSIBLE HARMONIC EXTENSIONS

Since conventional forms of scales are arbitrarily fixed, there is no reason why use should not be made of such modifications of these scales as will result in the enrichment of harmonic possibil-

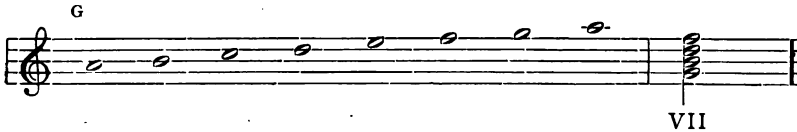
ities. Our present methods of determining what particular combinations of tones cause definable chords may be modified in a manner that will allow a widening of the harmonic horizon. It is the purpose of this Section to indicate some of these extensions.

The scale in A is the normal form of the minor scale; the scale in B is the harmonic form of minor; the form in C is the ascending melodic minor; the scale in D corresponds exactly with our present form of the major scale **thought backwards** (that is, the half-steps are placed between 3-4 and 7-8, in the descending scale). The scale in B is normal minor with 7 raised a half-step in order to secure an ascending leading-tone, while the scale in D is the same as the normal minor except that 2 is lowered a half-step to secure a downward-tending leading-tone. The scale in D is quite as good as the one in B. The scale in E represents a modified form of the harmonic minor; that is, the tonic has both an upward-tending, and a downward-tending leading-tone. The scale in F is a form of minor that may be occasionally met with in Russian music, and may be considered as of probable oriental origin; both the tonic and the dominant have an upward-tending leading-tone.



With the exception of the various forms of the augmented 6th-chords, our conventionalized methods of reckoning chords demand that when placed in fundamental form they shall be arranged in intervals of Thirds. This is excellent, as far as it goes, but it is based largely on a false premise; heretofore, the manner in which a chord is indicated by notes, or pitch-signs, has been the deter-

mining factor in the naming of the chord. In reality, a chord should be known by its effect in sound, utterly regardless of what manner of pitch-indication may be used to represent it to the eye. The various forms of minor scales seen in A, B, C, D, E, and F offer considerable proof of this statement.



Our conventional systems of harmony recognize a dominant 7th-chord as a chord occurring only on V of either a major or a harmonic minor scale. But a 7th-chord of this identical type may be found on VII of the normal minor, as seen in G, on both IV and V in the ascending melodic minor mode, as seen in I, 1 and I, 2; and on III of the minor scale as shown in L.



The harmonic form of the minor scale as seen in H offers four chords not heretofore recognized as definable chords, though to the ear they are as definite as any form of our various conventionalized chords. The tones F-G#-C, as seen in H 1 are identical with our minor chord on F, F-A \flat -C. The chord in H 2, D-F-G#-C is identical with the secondary 7th-chord D-F-A \flat -C. The chord in H 3, F-G#-C-E, is precisely the same as the secondary 7th-chord F-A \flat -C-E. The chord in H 4, D-E-G#-C, is identical with the 2-#4-#6-chord on D, D-E-G#-B#.

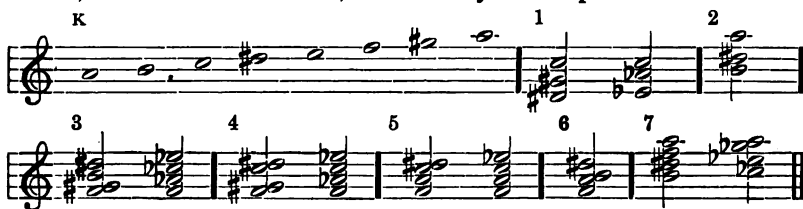


The ascending melodic minor scale, as seen in I, will afford a still greater widening of the harmonic possibilities. Here we have a dominant 7th-chord on both IV and V. The chord in I, 3 is the

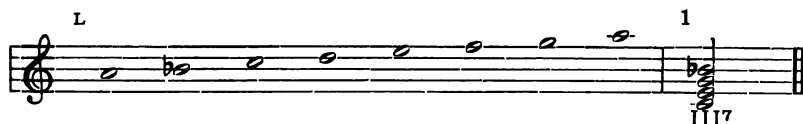
same as a dominant 7th-chord on B with the Third omitted. The tones G \sharp -C-D-F \sharp seen in 1, 4 are identical with a 3- \sharp 4- \sharp 6-chord on A \flat , A \flat -C-D-F \sharp . These same tones when arranged from D, as seen in 1, 5, D-F \sharp -G \sharp -C, correspond to a 3- \sharp 4- \sharp 6-chord on D, D-F \sharp -G \sharp -B \sharp , or to a similar chord on E $\flat\flat$, E $\flat\flat$ -G \flat -A \flat -C.



The minor scale with both an ascending and a descending leading-tone, as illustrated in E and J, will give two forms of the augmented 6th-chords, J 1 showing the 3-5- \sharp 6-chord on B \flat , which chord is the enharmonic equivalent of a dominant 7th-chord on B \flat . J 2 shows a 3- \sharp 4- \sharp 6-chord on B \flat , and these same tones rearranged from E, as seen in J 3, give the enharmonic equivalent of a 3- \sharp 4- \sharp 6-chord on E or F \flat . The peculiar 9th-chord as seen in J 4, C-E-G \sharp -B \flat -D, made from this scale, holds many latent possibilities.



The Russian form of the minor scale as seen in K, with an upward leading-tone to both the tonic and the dominant, is full of possibilities. The chord D \sharp -G \sharp -C is the enharmonic equivalent of the major chord on A \flat , as shown in K 1. This scale also gives the dominant 7th-chord on B with the Fifth omitted, as seen in K 2; the chord F-G \sharp -B-D \sharp , which is the enharmonic equivalent of the secondary 7th-chord F-A \flat -C \flat -E \flat as seen in K 3; the chord F-G \sharp -C-D \sharp , which is the equivalent of F-A \flat -C-E \flat ; the 3-5- \sharp 6-chord on F, which is the equivalent of a dominant 7th-chord on F, as seen in K 5; the 3- \sharp 4- \sharp 6-chord on F as seen in K 6; and the enharmonic equivalent of the 3- \sharp 4- \sharp 6-chord on C \flat as seen in K 7.



The minor scale with a downward-tending leading-tone to the tonic, as seen in L, will supply a dominant 7th-chord on III.

The following segments will partially illustrate some of the possibilities of this material. A word of caution is necessary, for the persons who are in the habit of getting a musical impression through the eye will discard these progressions on sight; they will find it wise to lay aside this prejudice in favor of printed notes, and listen instead to the effect in tones, not once, but several times. Tone alone is music. The printed notes are absolutely nothing but a conventionalized method of representing these tones to the eye.

1

I II⁷ VII⁷ IV I VI VII⁷ V⁷ II VI IV I II⁷ VII V

c b c b b c

2

3

A musical score for the song "The Rose Tree". The score is written for a piano and voice. The piano part is in the left hand, and the voice part is in the right hand. The key signature is one sharp (F#), and the time signature is 4/4. The piano part features a melody with eighth and sixteenth notes, and the voice part features a melody with quarter and eighth notes. The score includes a key signature change to one sharp (F#) and a time signature change to 4/4. The piano part ends with a double bar line, and the voice part continues with a final note.

4

Musical score for 'The Rose Tree' in 3/4 time. The melody is in G major (one sharp) and the bass line is in D minor (two flats). The key signature changes to D minor for the final measure. The melody consists of eighth and quarter notes, while the bass line features a mix of eighth, quarter, and half notes.

5

Example 1

6

Example 6, measures 1-4. The score is in 4/4 time, key of D major (one sharp). The melody is in the treble clef, and the bass line is in the bass clef. The melody consists of eighth and quarter notes, while the bass line consists of quarter and eighth notes.

7

8
8va.....

9 10
8va.....

Segment 1 is in strict accord with the normal minor scale as illustrated in A. In this example the dominant 7th-chord on VII is seen three times, once in fundamental form and twice in the third inversion. Segment 2 is the same as segment 1, except that in measure four a clearer suggestion of another key is heard, and the final chord is the major chord on V, instead of the minor chord. Segment 3, with the exception of the B \flat and the C \sharp in the final measure, is strictly according to the harmonic minor scale as illustrated in B. The various chords illustrated in H will be

found in this segment. The final measure may be used with or without the final accidentals that appear in brackets; the effect of either ending is quite different from the contrasted ending. Segment 4 is made from the melodic minor scale, and illustrates the use of the chords as found in 1. Here the dominant 7th-chord is shown on IV and on V. The ending may be with two major chords, with two minor chords, or the penultimate chord may be minor and the last one major, according to the effect that is desired. Segment 5 is made from the form of minor scale that has both an ascending and a descending leading-tone to the tonic. The material illustrated in j is here exemplified. Segment 6 illustrates the material derived from the Russian form of minor, as shown in k. Segment 7 is made from the minor scale with a downward leading-tone, but with no upward one. The French have been experimenting with the whole-tone scale, but they seem to have limited their harmonic material developed from this scale to the augmented chord. Segment 8, as well as segments 9 and 10, is in no definable key, but the effect in each case is easily possible, particularly if used with caution. With the exception of the final chord, segment 8 is composed of augmented chords, mainly with whole-step progressions in the treble part. Segment 9 is a peculiarly effective one made from a combination of augmented chords and diminished Sevenths. Segment 10 is a combination of augmented chords, secondary Sevenths and major chords. It is readily admitted that the notation of some of these examples is peculiar, but there are numerous examples in all modern music, including Liszt, MacDowell, Grieg, Mozkowski, Reger, Strauss, Debussy, etc., where just such things occur. In essence, it does not make a particle of difference what the notation may be; the effect upon the ear is the chief consideration. In many cases where ambiguous notation for tones occurs, a careful study of the composition will show that if the effects had always been written in the conventionalized manner, the effect upon the eye for reading would have been far more difficult.

A word of caution is necessary to the young composer, for if he searches out novel effects, and uses them merely on account of their novelty, his efforts will ring false, and his compositions will sound forced. If these effects are used, and their introduction seems necessary because of the musical logic of events, then they may become very effective indeed.

The term "dominant 7th-chord" applied to that type of 7th-chord consisting of a major triad with a minor Seventh added, is evidently a misnomer if applied to the same kind of a chord when used as a VII⁷ in normal minor, or as a IV⁷ in melodic minor, or on III⁷ of the minor scale with a descending leading-tone but with no ascending leading-tone. Similarly, it is out of place when this type of chord is used purely as a passing-chord without definable key-relation. If the term "dominant" is to be retained to define the 5 of a scale, then it seems wise to signify this kind of chord by a term which will not cause confusion. The suggestion is made here that perhaps the term "primary 7th-chord" might be a possible substitute. In such a case the primary 7th-chord may be upon any degree, the same as the secondary 7th-chords.

PART VII

NINTH-CHORDS

SECTION 1

CHORD EXERCISES

A 9th-chord may be built upon any degree of the scale, but the most commonly used 9th-chord is the dominant. In strict key-relation this chord consists of a dominant (or a primary) 7th-chord with a major Ninth added, though it is very common for the dominant minor 9th-chord to be used instead. In harmonic minor, the 9th-chord consists of a dominant (or primary) 7th with the minor Ninth added. These two chords are illustrated in segments 1 to 48, where various resolutions are shown for the fundamental chord and for several inversions. The inversion of the chord which would place the Ninth in the lowest voice is practically prohibited by its ugliness, but the other inversions, first, second, and third, are useful. When the Ninth of the chord moves down one degree while the other parts remain stationary, as in segment 10, the effect of the Ninth is purely that of a suspension. In four-part writing one of the tones of the chord must be omitted. This may be either the Fifth or the Third, but the omitted Fifth is more common. The flats in brackets, if both are used, will place the examples in harmonic minor. The possible progressions of this chord are unlimited, but the segments shown here indicate a sufficient number to give a good working knowledge of the chord.

V⁹ V⁷

11 12 13 14 15

V₇ I V₇ I a V₇ I V₇ I V₇ I a

16 17 18 19 20

V₇ I b V₇ I c V₇ I a V₇ IV V₇ IV a

21 22 23 24 25

V₇ IV b⁷ V₇ IV a⁷ V₇ IV b V₇ IV c⁷ V₇ IV c⁷

26 27 28 29 30

V₇ IV b V₇ IV a V₇ V₇ V₇ V₇ b V₇ V₇ c

31 32 33 34 35 36

V₇ V₇ V₇ V₇ a V₇ V₇ a V₇ III a V₇ IV b V₇ VI a

37 38 39 40 41 42

43 44 45 46 47 48

V_9^{\flat} III V_9^{\flat} V_7^{\flat} V_9^{\flat} I V_9^{\flat} I V_9^{\flat} IV⁷ V_9^{\flat} IV⁷
 b a a c a a b

V_9^{\flat} II⁷ V_9^{\flat} II⁷ V_9^{\flat} VI⁷ V_9^{\flat} VII⁷ V_9^{\flat} I⁷ V_9^{\flat} III⁷
 a b a c b b c

Segments 49 to 54 show some progressions of 9th-chords on the other degrees of the major scale, with resolutions. In nearly all such cases the effect is caused by a prolongation of two of the tones of the preceding chord, and the effect might as well be described as a double suspension. When the Seventh of such chords is left out, as seen in segments 55-58, the effect is that of a simple suspension, and the difference between that and the 7th-9th-chord is indicated in the omission of the figure 7 where the effect of a simple suspension occurs.

49 50 51 52 53

I IV⁹ II I IV⁹ II⁷ V I⁹ I V⁷ III⁹ I I II⁹ II⁷
 a a b a a

Exercise for ninth chords, measures 54-58. The exercise is written for two staves (treble and bass clef). The chords are indicated by Roman numerals with superscripts for the 7th and 9th degrees, and letters (a, b, c) for the 9th degree. The sequence of chords is: I, VI⁹, IV^a, I⁹, I, IV⁹, IV, V⁹, V, V⁷, VI, II⁹, II.

The following exercises will offer ample opportunity for working out the possibilities of the 9th-chords. The first four are strictly within the limits of the diatonic keys, but the other six make brief excursions into nearly related keys, though they are clearly centred in one particular key. The student should persist in his efforts until he has discovered musical parts for each of his voices, and a generally good effect for the whole exercise.

270. B \flat , F \sharp . $\frac{4}{4}$ $\overset{3}{I} \overset{7}{VI} - | V^9 - V^9 VII^7 | IV \overset{7}{I} \overset{7}{II} VII^7 | I - I - |$
 $IV - V^9 IV | V^7 V^7 I - | II - V^7 V^9 | VI - V^7 - | I - II V^7 | V^9 V^7 I VII^7 |$
 $I IV^7 V^9 V^7 | I IV I - ||$ 271. E, F. $\frac{4}{4}$ $\overset{5}{I} - V^9 V | IV \overset{7}{II} I - |$
 $I \cdot \overset{7}{I} V^9 V^7 | VI I I - | I \cdot \overset{7}{I} VI V^9 | V^7 V^7 VI I | II^7 V^7 I IV^7 | V^9 V^7 II^7 II^7 ||$
 272. c, e \flat . $\frac{3}{4}$ $\overset{3}{I} - IV | V^9 III V^7 | VI - IV IV^7 | V - V^7 | I \overset{7}{II} VII^9 |$
 $I \overset{7}{II} VII^9 | V^9 VI V^9 V^7 I \overset{7}{II} | V - - | I \overset{7}{II} II^7 | I IV VI |$
 $I V^7 IV^9 VI^7 IV | I \overset{7}{II} I - ||$ 273. b, g \sharp . $\frac{4}{4}$ $\overset{3}{I} - IV^7 II^7 | V^9 - I - |$
 $II^7 V^7 IV^7 | V^9 I V^7 - | VI VI VI IV^7 | II I IV V^9 VII^9 | I - VI^7 - | I V^9 VI - ||$

274. E^b. $\frac{3}{4}$ $\overset{8}{I}$ | $\overset{9}{II} \overset{7}{VII} f \overset{7}{VII}^\circ$ | $\overset{7}{II} I$ | $\overset{9}{III} \overset{7}{I} \overset{7}{V}$ | $I - c \overset{7}{V}$ | $\overset{9}{I} \overset{7}{I} V$ |

II

IV $\overset{7}{I}$ IV | $\overset{9}{V} \overset{7}{III} \overset{7}{V}$ | $\overset{9}{I} I -$ || 275. E. $\frac{3}{4}$ $\frac{4}{4}$ $\overset{7}{I} \overset{7}{I} \overset{7}{II} \overset{7}{VII}$ |

II

$\overset{7}{V} \overset{7}{V} \overset{7}{IV} \overset{7}{II} I -$ | $\overset{7}{V} \overset{7}{V} \overset{7}{VI} \overset{7}{IV}$ | $\overset{9}{II} \overset{7}{II} \overset{7}{I} \overset{7}{VI} V \overset{7}{V}$ | $\overset{7}{I} \overset{7}{I} \overset{9}{V} \overset{9}{V}$ |

IV

$\overset{7}{I} \overset{7}{V} \overset{7}{I} \overset{7}{VII}$ | $\overset{7}{I} \overset{9}{V} \overset{9}{I} \overset{9}{V}$ | $\overset{7}{VI} \overset{7}{VI} I -$ | $\overset{7}{I} \overset{7}{II} \overset{7}{VII}$ | $\overset{9}{V} \overset{7}{V} \overset{7}{IV} \overset{7}{II} I -$ |

V

V

IV

$\overset{7}{VI} \overset{7}{VI} \overset{7}{VII} \overset{7}{V}$ | $\overset{9}{III} \overset{7}{III} \overset{7}{IV} V I -$ | $\overset{7}{VI} \overset{7}{VI} \overset{9}{IV} \overset{9}{II}$ | $\overset{7}{VII} \overset{7}{VII} \overset{9}{V} \overset{7}{V}$ |

$\overset{7}{I} \overset{7}{V} \overset{7}{I} II$ | $\overset{7}{I} \overset{7}{V} \overset{7}{V} I -$ || 276. D. $\frac{6}{4}$ $\overset{5}{I}$ | $\overset{9}{IV} \overset{9}{II} A \overset{7}{VII} I - II$ |

V

$\overset{9}{V} \overset{9}{III} \overset{7}{V} \overset{7}{VI} I I$ | $\overset{9}{V} \overset{9}{III} I \overset{7}{VII} I V$ | $\overset{9}{V} \overset{7}{V} A \overset{9}{V} \overset{7}{VI} \overset{7}{V} I$ |

IV

I

III

$\overset{9}{IV} \overset{9}{II} A \overset{7}{VII} I b \overset{7}{VII}^\circ \overset{7}{V}$ | $\overset{9}{V} \overset{7}{I} \overset{7}{IV} \overset{7}{V} I e \overset{7}{VII}^\circ$ | $\overset{7}{II} \overset{7}{I} \overset{9}{V} \overset{7}{V} \overset{9}{V} \overset{7}{V} I -$ ||

II

II

277. C. $\frac{4}{4}$ $\overset{5}{I}$ | $\overset{9}{V} \overset{7}{I} \overset{9}{V} \overset{7}{V}$ | $\overset{9}{I} - I a \overset{7}{V}$ | $\overset{7}{VI} \overset{7}{d} \overset{7}{VII}^\circ I \overset{9}{V}$ |

II

$I - - a \overset{7}{V}$ | $\overset{9}{I} - I \overset{7}{I}$ | $\overset{9}{V} - \overset{7}{V} a \overset{7}{VII}^\circ$ | $\overset{7}{I} \overset{7}{V} \overset{7}{VI} \overset{7}{V}$ | $\overset{9}{I} - I -$ ||

II

IV

278. D^b. $\frac{3}{4}$ $\overset{5}{I} - IV$ | $\overset{9}{V} \overset{7}{V} \overset{9}{V} \overset{7}{V}$ | $I - III$ | $\overset{9}{IV} \overset{9}{II} f \overset{7}{VII}^\circ$ |

VI III $\widehat{V^9 V^7}$ | IV I - || 279. A. $\frac{3}{4}$ I | II II V^7 | I I I^7 | IV IV II I^7
_{b a} _b _{a 7}
I

V - V | V^9 V a VII $\overset{\text{maj.}}{I^7}$ | I^9 I I^7 | VII IV V^7 | I I - ||
I IV _a _a _b _b

SECTION 2

MELODIES FOR HARMONIZATION

These melodies will afford ample opportunity for the use of all forms of the dominant 9th-chords, as well as for Ninths upon other degrees than the dominant. Perfect liberty may be accorded the student, provided he succeeds in making melodious and musical voice-parts for the alto, tenor and bass. Passing-chords, passing-keys, etc., may be introduced at will, as well as more definite modulations, provided that the melody affords an opportune place for such digressions. Several versions for each melody should be devised and compared.

280

The first system of the musical score consists of two staves. Both staves are in the key of B-flat major (two flats) and 2/4 time. The melody is written on the upper staff, and the accompaniment is on the lower staff. The melody begins with a quarter note B-flat, followed by a quarter note A, a quarter note G, a quarter note F, a quarter note E, a quarter note D, a quarter note C, and a quarter note B. The accompaniment begins with a quarter note B-flat, followed by a quarter note A, a quarter note G, a quarter note F, a quarter note E, a quarter note D, a quarter note C, and a quarter note B.

281

[illegible]

282



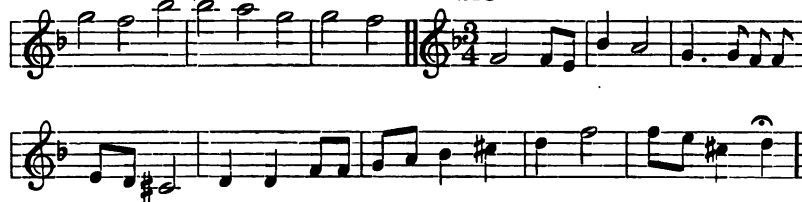
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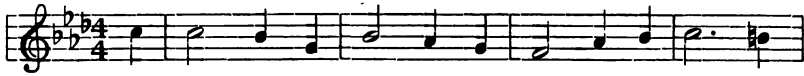
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PART VIII

CHORDS OF THE AUGMENTED-SIXTH

SECTION 1

EXERCISES WITH CHORDS

Before beginning the study of this Part the student should master the explanations of these chords as given in Harmony and Ear-Training, Paragraphs 505, 508, 550-564, 595-601, and should have worked out all the exercises wherein these chords are exemplified, Harmony and Ear-Training Paragraphs 565-579, and 689 to end.

As explained in Section 6 of Part VI the augmented-6th-chords are the only chords recognized by our conventional methods that are not built of superimposed major or minor Thirds.

All kinds of augmented-6th-chords (hereafter written β -chords) are considered to be in fundamental form when the two tones that cause the interval of the augmented Sixth are at that distance apart, with the other constituent tones placed between, as exemplified in the first chord in segments 1, 7, 13, and 15.

The 3-5-6#-chord will be marked β_5 as shown in the first chord of segment 17. The 3-4#-6#-chord will be marked β_4 as shown in the second chord in segment 17. The 3-6#-chord will be marked β , as shown in the third chord of segment 17. In each of these chords the Third is major, hence it will be omitted in the marking. The 2-4#-6#-chord will be marked β_2 as shown in the last chord of segment 17. Thus, β_5 means a 3-5-6#-chord; β_4 means a 3-4#-6#-chord; β means a 3-6#-chord; β_2 means a 2-4#-6#-chord. The figures indicate that when these respective chords are arranged

from the lower of the two tones that cause the augmented Sixth, the intervals are at those distances from it.

The more common resolutions of these chords are shown for the 5- β -chord in segments 1 to 6, and for the 4- β -chord in 7 to 12. The 2-4- β -chord in segment 13, and the β -chord in 15 may resolve in the same manner. The principle involved in segments 1 to 12 may be stated thus: the upper tone of the augmented Sixth moves up one half-step and the resultant tone becomes either the Root, the Third, or the Fifth of a major or a minor chord. It is equally true that the lower tone of the augmented Sixth moves down one half-step and the resultant tone also becomes the Root, Third or Fifth of a major or a minor chord.

Sometimes on account of the voice-leading the 5- β -chord will appear written with the intervals of a major Third, a doubly augmented Fourth, and an augmented Sixth, as shown in segment 14, and the second chord in segment 18.

When the β -chord is used in four-part writing the Third is usually doubled as shown in segment 16, though in some cases the Root* may be doubled, thus:



* The Root here indicates the lower of the two tones causing the augmented Sixth.



The β-chords may be used freely in all inversions; these will be marked the same as the inversions of all other chords, thus: —



It is impossible to place the β-chords in definite conventional tonalities; nevertheless these chords are very freely used in compositions that are clearly key-centred in some particular tonality. In this respect these chords closely resemble the diminished 7th-chords. More frequently than otherwise, it is equally as impossible to determine from what source these β-chords are derived. (The various possibilities of derivation are given in *Harmony and Ear-Training*, Paragraphs 560-564, and 595-602.)



Segments 2, 6, 8, 12, and 17 to 22 illustrate all the β -chords which may have a chord-of-resolution that belongs to C. It should be observed that these β -chords contain all the diatonic tones of C, as well as all the chromatic tones which occur between these diatonic tones.

23 24 25 26 27 28 29 30

$I_6^{\sharp} V$ V $I_6^{\sharp} V$ $I_6^{\sharp} V$ $I_6^{\sharp} V$ $I_6^{\sharp} III$ $I_6^{\sharp} III$ $I_6^{\sharp} III$ $I_6^{\sharp} III$
 a b c a a b a c b

31 or 32 33 34 35 36 37 38

$bII_6^{\sharp} IV$ I $bII_6^{\sharp} I$ a a $bII_6^{\sharp} IV$ b $II_6^{\sharp} I$ $bIII_6^{\sharp} V$ $bIII_6^{\sharp} V$ $bIII_6^{\sharp} V$ $bIII_6^{\sharp} V$ $bIII_6^{\sharp} II$
 b a a b a c b a b a b a

39 40 41 42 43 44 45 46

$IV_6^{\sharp} I$ $IV_6^{\sharp} I$ $IV_6^{\sharp} I$ $IV_6^{\sharp} I$ $bV_6^{\sharp} IV$ $bV_6^{\sharp} IV$ $bV_6^{\sharp} IV$ $bV_6^{\sharp} IV$
 a b b c a a a b b c

47 48 49 50 51 52 53 54

$\flat VI \sharp V$ $\flat VI \sharp$ I $\flat VI \sharp V$ $\flat VI \sharp$ I $\flat VII \sharp II$ $\flat VII \sharp IV$ $\flat VII \sharp IV$ $\flat VII \sharp II$

a b b c b b a b b c b

Segments 23 to 54 illustrate some of the progressions of these passing β -chords as used in a composition that might be key-centred in C. The markings under the chords indicate the variety of β -chord used, as well as the degree upon which each is founded. The flat sign before II in segments 31 to 33, before III in 34 to 38, before V in 43 to 46, before VI in 47 to 50, and before VII in 51 to 54, indicate merely that the Root of the β -chord may be considered as having that relation to the tonality, but this altered tone and the β -chord built on it are distinctly not within the key.

55 56

$\flat II \sharp$ or $\flat II \sharp$ followed by $\flat VI \sharp$ or $\flat VI \sharp$ followed by $\flat VII \sharp$ or $\flat VII \sharp$ followed by $\flat V$

a b

57 58 59

$\flat IV \sharp$ $\flat IV \sharp$ followed by $\flat VI \sharp$ or $\flat VI \sharp$ followed by $\flat V \sharp$ IV

a b

60 61 62

$\flat VI \sharp$ $\flat VI \sharp$ followed by $\flat VI \sharp$ or $\flat VI \sharp$ followed by $\flat VII \sharp$ or $\flat VII \sharp$ followed by $\flat IV \sharp$ VI followed by $\flat I \sharp$ V

b a a

Segments 63 to 67 are shown in musical notation. Segment 63 is in G major (one sharp) and shows a progression from a 3-5-β chord to a dominant 7th chord. Segments 64 to 67 are in C minor (no sharps or flats) and show various progressions involving β-chords and dominant 7th chords. The notation includes treble and bass staves with notes and accidentals.

63 64 65 66 67

g b V⁷ g V⁷ g V⁷ g V⁷ g V⁷

Segments 55 to 62 illustrate β -chords which may have a chord-of-resolution within a composition key-centred in *c*. A study of these segments will demonstrate that all the diatonic tones of *c*, as well as all the interlying chromatic tones, are included in the β -chords shown.

The β -chords are as free as all other kinds and may be made to progress as the composer wills into any other kind of a chord. Segments 63 to 67 illustrate some progressions into dominant 7th-chords.

Attention should be directed to the fact that the 3-5- β -chord and the dominant 7th-chord are identical in sound. The six ordinary resolutions of the chord as a dominant 7th, with the six other ordinary resolutions when used as a β -chord,

Two staves of musical notation showing six ordinary resolutions of the 3-5-β chord as a dominant 7th and six other ordinary resolutions when used as a β-chord. The notation includes treble and bass staves with notes and accidentals.

hold out unlimited possibilities of further progression. When the chord-of-resolution is major, it may be considered as the chord on I, IV, or V in major tonalities, or as on V or VI in harmonic minor, etc. When the chord-of-resolution is minor it may be considered as II, III, or VI in major, or as I or IV in minor, etc. The following will afford full opportunity for the use of all the β -chords. The student should persist in his efforts until he has succeeded in making a good, melodious version for each exercise.

$I \cdot \widehat{b}II^{\frac{g}{b}} IV | V^7 (c\sharp VII^{\frac{7}{c}}) V^7 | V^{\frac{g}{b}} - V^7 | I \cdot \widehat{I}^{\frac{g}{b}} III | V^7 - VI | I \cdot \widehat{IV}^{\frac{g}{b}} VI |$
 $V^7 - VI | II \cdot \widehat{b}VI^{\frac{g}{b}} I | V^7 - IV | I - (f\sharp III) | I - - ||$
 IV

296. a. $\frac{4}{4} I \cdot \widehat{VI}^{\frac{g}{b}} I VI^{\frac{g}{c}} | I - V^7 - | VI \cdot \widehat{b}VII^{\frac{g}{c}} VI VII^{\frac{7}{c}} | VI - VI^{\frac{g}{c}} - |$
 $V \cdot \widehat{C} V^7 I a VII^{\frac{7}{b}} | III^{\frac{g}{a}} \cdot \widehat{I} IV VI^{\frac{g}{c}} | I - VI^{\frac{g}{b}} - | I - - - ||$

297. C. $\frac{3}{4} I E II^{\frac{g}{b}} - | I V^7 bVII^{\frac{g}{c}} | VI II IV^{\frac{g}{a}} | G\sharp IV I - |$

$I a VII^{\frac{7}{a}} bII^{\frac{g}{b}} | I^{\text{maj.}} - - | I D b II^{\frac{g}{b}} - | I V^7 bVII^{\frac{g}{c}} | VI II IV^{\frac{g}{a}} | F IV I - |$

$I f\sharp VII^{\frac{7}{c}} bII^{\frac{g}{b}} | I^{\text{maj.}} - - | I B b II^{\frac{g}{b}} - | I V^7 bVII^{\frac{g}{c}} | VI II IV^{\frac{g}{a}} |$

$D IV I - | I e b VII bII^{\frac{g}{b}} | I^{\text{maj.}} - - | I G II^{\frac{g}{b}} - | I V^7 bVII^{\frac{g}{c}} |$

$VI II IV^{\frac{g}{a}} | B IV I - | I c VII^{\frac{7}{c}} V^7 | I - - ||$
 V^7

298. g#. $\frac{4}{4} \widehat{I} - VI^{\frac{g}{a}} VI^{\frac{g}{b}} | I - V^7 bII^{\frac{g}{b}} | I \widehat{I}^{\frac{7}{c}} II^{\frac{7}{b}} VI^{\frac{g}{a}} | III V^7 VI - |$
 $VI - bII^{\frac{g}{b}} bII^{\frac{g}{a}} | IV I VI^{\frac{g}{a}} - | V^{\frac{g}{b}} I V^7 bII^{\frac{g}{b}} | VI IV I - ||$

299. Gb. $\frac{3}{4} \widehat{I} - \sharp IV^{\frac{g}{b}} | II^{\circ} - II | V^7 bVII^{\frac{g}{c}} II | bVII^{\frac{g}{b}} - V^7 |$

$VI (e b III) I^{\frac{g}{b}} | V VII^{\frac{7}{b}} bVII^{\frac{g}{a}} | IV bVI^{\frac{g}{c}} III | V^7 I - ||$

SECTION 2

MELODIES FOR HARMONIZATION

The following melodies will afford opportunity for a full use of the various chords in all forms and inversions. Passing-keys as well as passing-chords may be freely used, or more definite modulations into other keys may be used. The student should persist in his efforts until he has succeeded in evolving melodious voice-parts, and has secured a generally good effect for each exercise.

300



301



302



303



304



305

306

307

308

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ADDENDA

CHORDS OF THE ELEVENTH AND THIRTEENTH

Combinations of tones that cause such possibilities are always a result of suspensions, anticipations, etc., and do not affect the principles of part-writing as already defined. A few examples of such occur thus:



ORGAN POINT

The principles underlying organ point are given in *Harmony and Ear-Training*, Paragraphs 580 to 584. These do not in the least affect the general principles of part-writing, but are merely slight additions to these principles.

HARMONIC AND MELODIC EMBELLISHMENT

The student should make a careful study of the possibilities of the various means of enrichment as explained and exemplified in *Harmony and Ear-Training*, Paragraphs 520 to 549, and 580 to 588; then use some of the versions of his exercises already worked out and seek to improve these musically by the use of the devices there explained.

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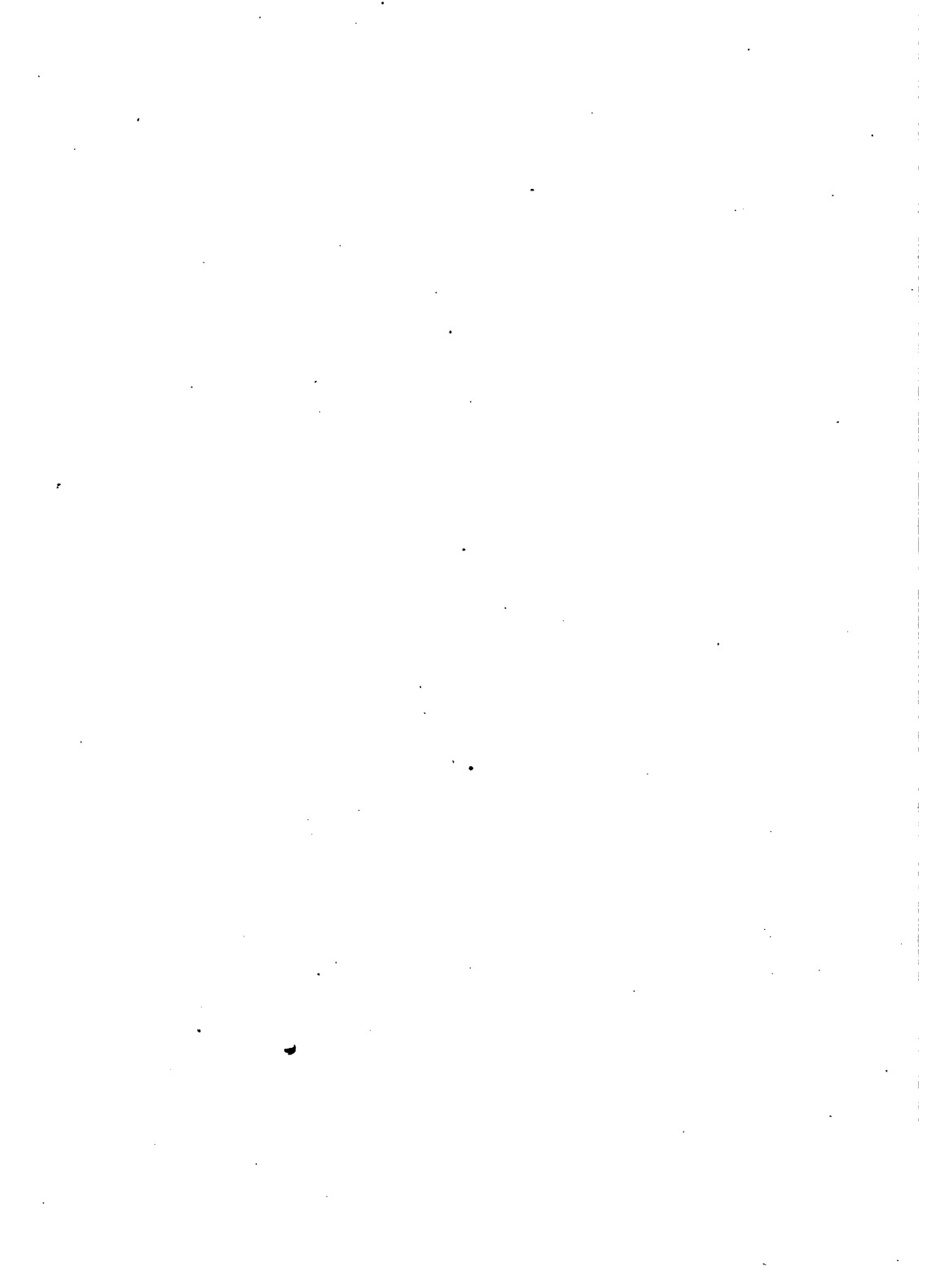
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